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# 1982

## Census of Mineral Industries

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MIC82-A-9

GEOGRAPHIC AREA SERIES

## Pacific States

Alaska, California, Hawaii, Oregon,  
Washington, Pacific Offshore



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The publications  
from the 1982 Economic and  
Agriculture Censuses are dedicated  
to the memory of Shirley Kallek,  
Associate Director for Economic Fields.  
During her career at the Bureau of the  
Census (1955 to 1983), she continually  
directed efforts to improve  
the timeliness and accuracy of  
economic statistics.

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# **1982**

# **Census of Mineral Industries**

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## **Pacific States**

Alaska, California, Hawaii, Oregon,  
Washington, Pacific Offshore

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Issued April 1985



**U.S. Department of Commerce**

**Malcolm Baldrige**, Secretary

**Clarence J. Brown**, Deputy Secretary

**Sidney Jones**, Under Secretary for  
Economic Affairs

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Gaylord E. Worden, Chief

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## ECONOMIC CENSUSES OVER TIME

The early beginnings of America's industrial output were first measured in the United States in the 1810 Decennial Census and again in 1820, when questions on manufacturing were included with those for population. Beginning with the 1840 Decennial Census, there were enumerations of manufactures and mineral industries at 10-year intervals up to and including the year 1900 for manufactures and 1940 for mineral industries. The latter census was taken again for 1954, 1958, 1963, and 1967.

Because of the increasing dominance of manufacturing in the early 20th century, Congress directed that quinquennial censuses of manufactures be taken beginning in 1905. However, from 1919 through 1939, these censuses were conducted every 2 years. The need for war-related current surveys in the early 1940's postponed the next census of manufactures until 1948 (for 1947). That census was again taken for 1954, 1958, 1963, and 1967.

Retail and wholesale trade data were first collected in 1930, and in 1933 information on selected service industries was added to the data-collection operation. These business censuses, as they were called, were again taken for 1935, 1939 (as part of the 1940 decennial program), 1948, 1954, 1958, 1963, and 1967.

Information on construction industries was first obtained in 1930 and again for 1935 and 1939. Data for the full spectrum of construction industries were not gathered again until 1968 (for 1967).

The need for transportation data to supplement information available from existing governmental or private sources was recognized by Congress in the late 1950's and early 1960's. The census of transportation (consisting of several surveys) was first taken for 1963 and again for 1967.

Since 1967, all of the above censuses have been taken quinquennially as part of the Census Bureau's economic census program. (For the 1977 censuses, the coverage of the service

industries was broadened from "selected services" to all services, except religious organizations and private households. A total of 41 additional four-digit standard industrial classifications<sup>1</sup> (SIC's) in 7 SIC major groups was added to the scope of the census. While most of the industries included for the first time for 1977 were covered again for 1982, some were not, i.e., hospitals; elementary and secondary schools; colleges, universities, and professional schools; junior colleges and technical institutes; labor unions; and political organizations.)

The first manufacturing census for an outlying area was conducted in Puerto Rico for the year 1909. Thereafter, with the exception of 1929, a census was taken at 10-year intervals through 1949. The first censuses of retail trade, wholesale trade, and selected service industries in Puerto Rico were conducted for 1939. These censuses also were taken for the years 1949, 1954, 1958, 1963, and 1967. A census of construction industries was first introduced in Puerto Rico for 1967. These censuses of Puerto Rico have been taken since then for the years 1972, 1977, and 1982.

Censuses of manufactures, retail trade, wholesale trade, and selected service industries were conducted in Guam and the Virgin Islands of the United States for 1958, 1963, 1967, 1972, 1977, and 1982. Censuses of mineral industries were taken in the Virgin Islands of the United States for the years 1958, 1963, and 1967 but not since that time. A census of construction industries was also undertaken in these areas for 1972, 1977, and 1982.

Retail trade, wholesale trade, selected service industries, manufacturing, and construction industries were canvassed for the first time in the Northern Mariana Islands in 1983 (for 1982).

For 1982, the economic censuses and the agriculture census were conducted concurrently.

## USES OF THE ECONOMIC CENSUSES

The economic censuses are the major source for facts about the structure and functioning of the Nation's economy and provide essential information for government, business, industry, and the general public. They provide an important part of the framework for such composite measures as the gross national product, input-output measures, indexes of industrial production, and indexes measuring productivity and price levels. Information from the censuses is used to establish sampling frames and as benchmarks for current surveys of business activity, which are essential for measuring short-term economic conditions.

<sup>1</sup>Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 041-001-00066-6. 1977 Supplement. Stock No. 003-005-00176-0.



State and local governments use census data to assess business activities within their jurisdictions. The private sector uses the data to forecast general economic conditions; analyze sales performance; lay out sales territories; allocate funds for advertising; decide on locations for new plants, warehouses, or stores; and measure potential markets in terms of size, geographic areas, kinds of business, and kinds of products made or sold.

Following every census, thousands of businesses and other users purchase reports. Likewise, census facts are widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. All 1982 data are available on microfiche from the U.S. Government Printing Office and most data on computer tape from the Census Bureau. Finally, the more than 50 State Data Centers also are suppliers of economic census statistics.

## **AUTHORITY AND SCOPE OF THE ECONOMIC CENSUSES**

The economic censuses are required by law under title 13 of the United States Code, sections 131, 191, and 224, which directs that they be taken at 5-year intervals for the years ending in 2 and 7. The 1982 Economic Censuses covered manufacturing, mining, construction industries, retail trade, wholesale trade, service industries, and selected transportation activities. Special programs also cover minority-owned and women-owned businesses. The next economic censuses are scheduled to be taken in 1988 for the year 1987.

## **CENSUS OF MINERAL INDUSTRIES**

### **General**

The 1982 Census of Mineral Industries is the 19th census of mining establishments in the United States. For 1982, it was conducted jointly with the censuses of manufactures, construction industries, retail and wholesale trades, service industries, selected transportation activities, and minority-owned and women-owned businesses.

This report, from the 1982 Census of Mineral Industries, is one of a series of 9 geographic division reports, each of which provides statistics for individual states within a defined geographic area. Additional separate reports are issued for individual industries or groups of related industries and on special subjects, such as size of establishments, type of organization, assets, capital expenditures, type of operation, and fuels and electric energy consumed.

These separate reports subsequently will be issued as portions of the final census volume. The volume—Subject, Industry, and Area Statistics—will show comparative figures for industries and States on the more important measures of the activity of mining establishments, such as employment, payrolls, value of shipments and receipts, capital expenditures, value added by mining, selected supplies consumed, and energy used. It will include, besides the industry statistics, geographic area statistics (number of establishments, employment, payrolls, value added, cost of supplies, value of shipments and receipts, and capital expenditures) for each State and county, by industry group and

statistics on selected subjects. The introduction to the final volume of the census of mineral industries will discuss; at greater length, many of the subjects described in this introduction. For example, the volume text will discuss the economic significance of the mining sector, the relation of value added by mining to value added by manufacture, some of the changes in statistical concepts over the history of the census, and the valuation problems arising from intracompany transfers between mining establishments, manufacturing plants, and sales offices and sales branches of a company.

## **Scope of Census and Definition of Mineral Industries**

The 1982 Census of Mineral Industries covers all establishments with one paid employee or more primarily engaged in mining as defined in the 1972 Standard Industrial Classification (SIC) Manual.<sup>1</sup> This is the system of industrial classification developed over a period of years by experts on classification in government and private industry under the guidance of the Office of Information and Regulatory Affairs, Office of Management and Budget. This system of classification is in general use among government agencies as well as organizations outside the government.

The SIC manual defines mining in the broad sense to include the extraction of minerals occurring naturally: Solids such as coal and ores, liquids such as crude petroleum, and gases such as natural gas. The term "mining" is used in the broad sense to include quarrying, well operation, milling (crushing, screening, washing, flotation, etc.) and other preparation needed to make minerals marketable. Exploration is included as is the development of mineral properties. Services performed on a contract, fee, or other basis in the exploration and development of mineral properties are classified separately but within this division.

Mining operations are classified by industry on the basis of the principal mineral produced or, if there is no production, on the basis of the principal mineral for which exploration or development work is in progress. The recovery of material from culm banks, ore dumps, and other waste minerals piles is classified in the appropriate mining industry according to the mineral product recovered.

The crushing, grinding, or other treatment of certain earths, rocks, and other nonmetallic minerals not in conjunction with mining activities are not included in this division but are classified as manufacturing. Hauling and other transportation beyond the mine property and contract hauling (except out of open pits in conjunction with mining) also are excluded.

Mining operations carried on as secondary activities at manufacturing establishments (such as clay pits at clay products plants or sand and gravel operations at ready-mixed concrete plants) are not within the scope of this census. However, selected data (production workers' wages and hours; total cost of supplies, fuels, electric energy, and contract work; and quantity of production for mined products) on such mining activities have been obtained in the 1982 Census of Manufactures and are included in the mining reports. They are clearly specified wherever included.

<sup>1</sup>Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 041-001-00066-6. 1977 Supplement. Stock No. 003-005-00176-0.



## Establishment Basis of Reporting

The census of mineral industries covers each mining establishment of firms with one paid employee or more operating in the United States. A firm operating more than one establishment is required to file a separate report for each location. A mineral establishment is defined as a single physical location where mineral operations are conducted.

For oil and gas field operations and for contract services, the basis for reporting is different from the "establishment" basis used for other types of mining. Firms operating oil and gas wells, drilling wells, or exploring for oil and gas for their own account were required to submit a separate report for each State or off-shore area adjacent to a State in which it conducted such activities and to include employment, production, and capital expenditures data at the county level. Firms that performed contract services for oil and gas field operations or for mining establishments were required to submit one report covering all such activities in the United States and to include information on receipts for services by State and county. These consolidated reports were then allocated to county establishments based on the data reported at the county level. The 1982 figures for establishments include the summation of operations within each county allocated from these State or nationwide reports and, therefore, are not comparable to prior censuses.

Establishments, as presented in this report, are those in operation "during the year." In the General Summary report (MIC82-S-1), a comparison will be made at the U.S. level of the number of establishments in operation "during the year" and at the "end of the year."

## Use of Administrative Records

From a mailout universe of about 36,000 mining establishments, approximately 11,000 small single-establishment companies were not mailed a questionnaire. For these establishments, some employment, payroll, and receipts data were obtained from the administrative records of other agencies. Selection of the small establishment nonmail cases was done on an industry-by-industry basis, and a variable cutoff was used to determine those establishments for which administrative records were to be used in place of a census report. This information was then used in conjunction with industry averages and other information to estimate the statistics for administrative-record and nonresponse establishments. The first column in tables 2a and 5 provides an indication of the extent that these establishments account for the figures shown. The value of shipments and receipts and cost of supplies were generally not distributed among specific products and supplies for these establishments, but were included in the product and supply "not specified by kind" categories. Overall, establishments for which administrative-record data were used accounted for less than 2 percent of total value of shipments and receipts.

The industry classification codes included in the administrative-record files were used for those establishments excused from filing census forms. Generally, these codes were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description is incomplete, or where there are relatively fine lines of demarcation among industries or between mining and nonmining activities, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product or activity information. Therefore, the total establishment count should be

viewed as an approximate measure. The counts for establishments with 20 employees or more are far more reliable.

In the 1982 census, as in the 1977, 1972, and 1967 censuses, data for single-unit firms without paid employees were excluded. This exclusion had only a slight effect on industry aggregates for most industries. Data for firms without employees were included in the 1963, 1958, and 1954 censuses if they reported more than \$500 in (1) value of shipments and receipts, (2) cost of supplies and purchased machinery, or (3) capital expenditures.

## Auxiliaries

Statistics for employment and payroll for individual industries and industry groups also include employment and payroll figures for administrative offices, warehouses, storage facilities, and other auxiliary establishments servicing mining establishments. As in previous censuses, respondents were asked to file separate reports (Form ES-9200) for any separately operated auxiliary establishments. Classification of employment and payroll data at such auxiliary establishments was based on the mining establishments served.

## Industry Classification of Establishments

Each of the establishments covered by the census was classified in one of 42 mineral industries in accordance with the industry definitions in the SIC system. Under this system of classification, an industry is generally defined as a group of establishments producing the same main product or closely related group of products. The resulting group of establishments must be significant in terms of its number, value added by mining, value of shipments and receipts, and number of employees. Application of these criteria led to formulation of 42 mining industries, to each of which a four-digit code number was assigned. The classification system also provides broader groups of industries, with twenty three-digit groups and five two-digit groups. Within industries, the system provides for seven-digit products and five-digit product classes. Products are considered primary to an industry if the first four digits of the product codes are the same as the industry code. Products whose first four code numbers differ from the industry code are called secondary products. To determine the industry classification of an establishment, the seven-digit products are grouped together according to the first four digits of the product code. The first four digits of the group of products with the largest value of production become the industry code for the establishment. (For mineral service industries, the classification is on the basis of receipts for services performed.)

In most industries, establishments making products falling into the same industry category use a variety of processes. Separate statistics are provided on the various types of operation. Whenever possible, separate figures are shown for establishments with mines only, mines with preparation plants, and preparation plants only. Separate figures are provided by type of mine (underground, open pit, and combination). Separate statistics also are provided on producing and nonproducing operations, an establishment being defined as nonproducing if no mineral products were shipped during the year.

Statistics also are usually provided on the production of minerals mined and used in the same establishment for producing prepared minerals or used at the producing establishment for fuel.



Differences in the integration of production processes and types of operation should be considered when relating the general items (employment, payrolls, value added, etc.) to the product and material data.

## CENSUS DISCLOSURE RULES

The Bureau of the Census is prohibited by Federal law from publishing any statistics that disclose information reported by individual companies. However, the number of companies classified in a specific industry is not considered a disclosure, so this item may be given even though other information is withheld.

The disclosure analysis for the State statistics in the tables of this report is based on the total value of shipments and receipts and capital expenditures. Whenever the total value of shipments and receipts cannot be shown without disclosing information for individual companies, the complete line has been suppressed. If capital expenditures alone is a disclosure, only total capital expenditures and cost of supplies statistics are suppressed. However, the suppressed data are included in higher level totals.

## MICROFICHE

All data in the final reports and volume are available on microfiche. Microfiche reports are sold by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

## SPECIAL TABULATIONS

Public-use tapes are not available for 1982 Census of Mineral Industries data. However, special tabulations of data collected may be obtained on computer tape or in tabular form. The data

will be in summary form and subject to the same rules prohibiting disclosure of confidential information (such as name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications. Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief, Industry Division, Bureau of the Census, Washington, D.C. 20233.

## ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- Represents zero.
- (D) Withheld to avoid disclosing data for individual companies.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate or a consistency review.
- (X) Not applicable.
- (Z) Less than half the unit shown.
- n.e.c. Not elsewhere classified.
- n.s.k. Not specified by kind.
- r Revised.
- SIC Standard Industrial Classification.

Other abbreviations, such as lb, gal, yd, and bbl, are used in the customary sense. Where the term "tons" only is used, it refers to short tons of 2,000 pounds; where the figures are expressed in tons of 2,240 pounds, the unit of measure is specified as "long tons" or "l. tons."

# Users' Guide for Locating Statistics in This Report by Table Number

[For explanation of terms, see appendix]

Item	State historical	State by industry	State by industry group and type of operation	State summary	State by county and industry group	State by county and establishment size
<b>Establishments:</b>						
Total number . . . . .	1	2a,2b	3	4a	5	6
Employment size . . . . .				4a		6
<b>Employment and payroll:</b>						
Number of employees . . . . .	1	2a	3	4a	5	
Payroll . . . . .	1	2a		4a	5	
Production, development, and exploration—						
Workers . . . . .	1	2a		4a	5	
Hours . . . . .	1	2a,2b		4a	5	
Wages . . . . .	1	2a,2b		4a	5	
Supplemental labor costs . . . . .				4a		
<b>Value added, cost of supplies, shipments, and inventories:</b>						
Value added by mining . . . . .	1	2a	3	4a	5	
Cost of supplies . . . . .	1	2a,2b		4a	5	
Resales, cost and value . . . . .				4a		
Purchased fuels consumed . . . . .				4a		
Purchased electricity . . . . .				4a		
Cost of contract work . . . . .				4a		
Value of shipments and receipts . . . . .	1	2a		4a	5	
Inventories . . . . .				4b		
<b>New and used capital expenditures, excluding land and rights:</b>						
Total . . . . .	1	2a		4a	5	
Buildings and structures . . . . .				4a		
Machinery and equipment . . . . .				4a		
Mineral exploration and development . . . . .				4a		
Rental payments . . . . .				4a		
Expensed mineral exploration, development, land, and rights . . . . .				4a		

# Alaska

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-- Not applicable.

# SUMMARY OF FINDINGS

The total value of shipments and receipts for the 236 establishments classified in mineral industries in Alaska was \$13,783 million in 1982, or 6 percent of the Nation's total. This compares to \$1,434 million in 1977, when it was 1 percent of the Nation's total. Value added by mining amounted to \$14,093 million in 1982, and payroll in mining amounted to \$525 million. All dollar figures shown are in current dollars for the years specified and have not been adjusted for changes in price levels.

When making comparisons to prior years, users should take into consideration the inflation that has occurred.

Mineral industries employment in Alaska was 13.4 thousand in 1982, or 1 percent of the Nation's total. This is an increase of 144 percent over 1977. The oil and gas extraction industry led all other mineral industries in the State, accounting for approximately 92 percent of the State's mineral industries employment.



**Table 1. Historical Statistics for the State: 1982 and Earlier Census Years**

[For meaning of abbreviations and symbols, see Introductory text. For explanation of terms, see appendix A]

Kind of operation and year	Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)				
<b>Mineral industries:</b>											
1982 <sup>1</sup> .....	2236	288	13.4	524.8	9.1	21.2	327.0	14 093.2	2 931.0	13 782.5	3 241.7
1977 <sup>1</sup> .....	154	47	5.5	152.7	3.5	7.7	84.3	1 215.9	919.4	1 433.9	701.4
1972 <sup>1</sup> .....	125	31	2.6	40.5	1.7	3.7	24.8	354.4	119.8	353.2	121.0
1967 <sup>1</sup> .....	126	35	2.2	28.5	1.8	4.5	22.3	223.5	165.4	187.8	201.3
1963 .....	138	18	1.3	12.1	1.1	2.4	9.7	52.6	43.7	62.4	33.9
1958 .....	156	11	1.0	7.5	.8	2.0	5.6	8.8	13.7	16.9	5.8
<b>Excluding oil and gas extraction industries:</b>											
1982 <sup>1</sup> .....	72	14	1.1	36.8	.9	1.9	29.8	38.3	58.9	60.3	34.9
1977 .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1972 .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1967 .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1963 .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1958 .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: For data prior to 1958, see 1963 Census of Mineral Industries, volume II.

<sup>1</sup>Beginning with 1967, data for single-unit establishments without paid employees were excluded from the census.

<sup>2</sup>Not comparable to prior years. See Introduction for further explanation.

**Table 2a. Mineral Establishment Statistics by Industry for the State: 1982 and 1977**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Industry group and industry	1982											1977		
		Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expendi- tures (million dollars)	All em- ployees <sup>2</sup> (1,000)	Value added by mining (million dollars)	
		Total (number)	With 20 employees or more (number)	Number <sup>2</sup> (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)							
		E <sup>1</sup>													
	All mineral industries ----	-	236	88	13.4	524.8	9.1	21.2	327.0	14 093.2	2 931.0	13 782.5	3 241.7	5.5	1 215.9
10	Metal mining-----	E2	53	10	.9	25.7	.7	1.5	21.6	11.2	38.9	27.8	22.3	BB	(D)
104	Gold and silver ores -----	E4	32	6	.3	9.0	.3	.6	7.2	9.9	(D)	13.5	(D)	AA	(D)
1041	Gold ores -----	E3	31	6	BB	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	AA	(D)
1061	Ferroalloy ores, except vanadium -----	E9	3	1	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
1081	Metal mining services -----	-	7	2	BB	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
12	Bituminous coal and lignite -----	-	1	1	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
1211	Bituminous coal and lignite -----	-	1	1	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
13	Oil and gas extraction -----	-	164	74	12.3	488.0	8.2	19.3	297.2	14 054.9	2 874.1	13 722.2	3 206.8	5.0	1 198.5
1311	Crude petroleum and natural gas-----	-	61	16	FF	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	2.3	1 058.8
138	Oil and gas field services -----	E1	100	58	8.2	272.4	6.7	16.0	217.8	845.8	320.7	1 011.7	154.8	FF	(D)
1381	Drilling oil and gas wells -----	E1	23	17	2.6	112.7	2.2	6.2	97.1	363.7	118.6	395.0	87.3	1.0	87.2
1382	Oil and gas field exploration services -----	-	18	7	FF	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	CC	(D)
1389	Oil and gas field services, n.e.c. -----	E1	59	34	FF	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1.0	44.8
14	Nonmetallic minerals, except fuels -----	E1	18	3	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.2	6.4
1481	Nonmetallic minerals services --	-	8	3	.1	3.8	.1	.2	2.2	8.0	(D)	9.0	(D)	.2	4.8

<sup>1</sup>Payroll and sales data for some small single-unit companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate items shown for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of figures shown: E1—10 to 19 percent; E2—20 to 29 percent; E3—30 to 39 percent; E4—40 to 49 percent; E5—50 to 59 percent; E6—60 to 69 percent; E7—70 to 79 percent; E8—80 to 89 percent; E9—90 percent or more.

<sup>2</sup>General statistics for some industries and industry groups are withheld to avoid disclosing data for individual companies. However, for such industries and industry groups with 100 employees or more, number of establishments is shown and employment size range is indicated by one of the following symbols: AA—100 to 249 employees; BB—250 to 499 employees; CC—500 to 999 employees; EE—1,000 to 2,499 employees; FF—2,500 employees or more.

**Table 2b. Mining Activities of Manufacturing Establishments With Associated Mines by Industry for the State: 1982**

[Not applicable]

**Table 3. Selected Statistics by Type of Operation and Industry Group for the State: 1982**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Industry group and item	All types of establishments	Producing establishments										Non-producing establishments	
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants		Undistributed¹
				Total	Under-ground mines	Open pit mines	Combination methods, well operations, and other methods	Total	Under-ground mines	Open pit mines	Combination and other methods			
	<b>ALL MINERAL INDUSTRIES</b>													
	Establishments.....number...	236	201	30	1	-	29	13	-	13	-	3	155	35
	Employees.....1,000...	13.4	12.1	(D)	(D)	-	(D)	.3	-	.3	-	(D)	(D)	1.3
	Value added in mining.....mil. dol...	14 093.2	13 919.4	(D)	(D)	-	(D)	21.8	-	21.8	-	(D)	(D)	173.8
<b>10</b>	<b>METAL MINING</b>													
	Establishments.....number...	53	45	1	1	-	-	8	-	8	-	-	36	8
	Employees.....1,000...	.9	(D)	(D)	(D)	-	-	(D)	-	(D)	-	-	.4	(D)
	Value added in mining.....mil. dol...	11.2	(D)	(D)	(D)	-	-	(D)	-	(D)	-	-	14.6	(D)
<b>103</b>	<b>Lead and zinc ores</b>													
	Establishments.....number...	2	-	-	-	-	-	-	-	-	-	-	-	2
	Employees.....1,000...	(D)	-	-	-	-	-	-	-	-	-	-	-	(D)
	Value added in mining.....mil. dol...	(D)	-	-	-	-	-	-	-	-	-	-	-	(D)
<b>104</b>	<b>Gold and silver ores</b>													
	Establishments.....number...	32	28	1	1	-	-	8	-	8	-	-	19	4
	Employees.....1,000...	.3	(D)	(D)	(D)	-	-	(D)	-	(D)	-	-	.1	(Z)
	Value added in mining.....mil. dol...	9.9	(D)	(D)	(D)	-	-	(D)	-	(D)	-	-	4.8	(Z)
<b>106</b>	<b>Ferroalloy ores, except vanadium</b>													
	Establishments.....number...	3	2	-	-	-	-	-	-	-	-	-	2	1
	Employees.....1,000...	(D)	(D)	-	-	-	-	-	-	-	-	-	(D)	(D)
	Value added in mining.....mil. dol...	(D)	(D)	-	-	-	-	-	-	-	-	-	(D)	(D)
<b>108</b>	<b>Metal mining services</b>													
	Establishments.....number...	7	7	-	-	-	-	-	-	-	-	-	7	-
	Employees.....1,000...	(D)	(D)	-	-	-	-	-	-	-	-	-	(D)	-
	Value added in mining.....mil. dol...	(D)	(D)	-	-	-	-	-	-	-	-	-	(D)	-
<b>109</b>	<b>Miscellaneous metal ores</b>													
	Establishments.....number...	9	8	-	-	-	-	-	-	-	-	-	8	1
	Employees.....1,000...	(D)	(D)	-	-	-	-	-	-	-	-	-	(D)	(D)
	Value added in mining.....mil. dol...	(D)	(D)	-	-	-	-	-	-	-	-	-	(D)	(D)
<b>12</b>	<b>BITUMINOUS COAL AND LIGNITE MINING</b>													
	Establishments.....number...	1	1	-	-	-	-	1	-	1	-	-	-	-
	Employees.....1,000...	(D)	(D)	-	-	-	-	(D)	-	(D)	-	-	-	-
	Value added in mining.....mil. dol...	(D)	(D)	-	-	-	-	(D)	-	(D)	-	-	-	-
<b>121</b>	<b>Bituminous coal and lignite mining</b>													
	Establishments.....number...	1	1	-	-	-	-	1	-	1	-	-	-	-
	Employees.....1,000...	(D)	(D)	-	-	-	-	(D)	-	(D)	-	-	-	-
	Value added in mining.....mil. dol...	(D)	(D)	-	-	-	-	(D)	-	(D)	-	-	-	-

See footnotes at end of table.



**Table 3. Selected Statistics by Type of Operation and Industry Group for the State: 1982—**  
**Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Industry group and item	All types of estab- lish- ments	Producing establishments										Nonpro- ducing estab- lish- ments	
			Total	Mines only				Mines with preparation plants				Sepsa- rately operated prepara- tion plants		Undistri- buted <sup>1</sup>
				Total	Under- ground mines	Open pit mines	Combina- tion methods, well operations, and other methods	Total	Under- ground mines	Open pit mines	Combina- tion and other methods			
13	<b>OIL AND GAS EXTRACTION</b>													
	Establishments.....number...	164	137	29	-	-	29	-	-	-	-	3	105	27
	Employees.....1,000...	12.3	(D)	(D)	-	-	(D)	-	-	-	-	(D)	(D)	(D)
	Value added in mining.....mil. dol...	14 054.9	(D)	(D)	-	-	(D)	-	-	-	-	-	845.8	(D)
131	<b>Crude petroleum and natural gas</b>													
	Establishments.....number...	61	34	29	-	-	29	-	-	-	-	-	5	27
	Employees.....1,000...	(D)	(D)	(D)	-	-	(D)	-	-	-	-	-	(D)	(D)
	Value added in mining.....mil. dol...	(D)	(D)	(D)	-	-	(D)	-	-	-	-	-	-	(D)
132	<b>Natural gas liquids</b>													
	Establishments.....number...	3	3	-	-	-	-	-	-	-	-	3	-	-
	Employees.....1,000...	(D)	(D)	-	-	-	-	-	-	-	-	(D)	-	-
	Value added in mining.....mil. dol...	(D)	(D)	-	-	-	-	-	-	-	-	(D)	-	-
138	<b>Oil and gas field services</b>													
	Establishments.....number...	100	100	-	-	-	-	-	-	-	-	-	100	-
	Employees.....1,000...	8.2	8.2	-	-	-	-	-	-	-	-	-	8.2	-
	Value added in mining.....mil. dol...	845.8	845.8	-	-	-	-	-	-	-	-	-	845.8	-
14	<b>NONMETALLIC MINERALS, EXCEPT FUELS</b>													
	Establishments.....number...	18	18	-	-	-	-	4	-	4	-	-	14	-
	Employees.....1,000...	(D)	(D)	-	-	-	-	(D)	-	(D)	-	-	(D)	-
	Value added in mining.....mil. dol...	(D)	(D)	-	-	-	-	(D)	-	(D)	-	-	(D)	-
142	<b>Crushed and broken stone, including riprap</b>													
	Establishments.....number...	1	1	-	-	-	-	1	-	1	-	-	-	-
	Employees.....1,000...	(D)	(D)	-	-	-	-	(D)	-	(D)	-	-	-	-
	Value added in mining.....mil. dol...	(D)	(D)	-	-	-	-	(D)	-	(D)	-	-	-	-
144	<b>Sand and gravel</b>													
	Establishments.....number...	8	8	-	-	-	-	2	-	2	-	-	6	-
	Employees.....1,000...	(D)	(D)	-	-	-	-	(D)	-	(D)	-	-	(D)	-
	Value added in mining.....mil. dol...	(D)	(D)	-	-	-	-	(D)	-	(D)	-	-	(D)	-
148	<b>Nonmetallic minerals services</b>													
	Establishments.....number...	8	8	-	-	-	-	-	-	-	-	-	8	-
	Employees.....1,000...	.1	.1	-	-	-	-	-	-	-	-	-	.1	-
	Value added in mining.....mil. dol...	8.0	8.0	-	-	-	-	-	-	-	-	-	8.0	-
149	<b>Miscellaneous nonmetallic minerals</b>													
	Establishments.....number...	1	1	-	-	-	-	1	-	1	-	-	-	-
	Employees.....1,000...	(D)	(D)	-	-	-	-	(D)	-	(D)	-	-	-	-
	Value added in mining.....mil. dol...	(D)	(D)	-	-	-	-	(D)	-	(D)	-	-	-	-

<sup>1</sup>Includes data for separately operated auxiliary establishments in addition to establishments that were not possible to classify based on the information available.

**Table 4a. Summary Statistics for the State: 1982**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1982	Item	1982
Establishments during year ----- number -----	236	Cost of supplies ----- mil. dol. -----	2 931.0
With 0 to 19 employees ----- do. -----	148	Supplies used, minerals received, and purchased machinery installed ----- do. -----	1 609.9
With 20 to 99 employees ----- do. -----	56	Resales ----- do. -----	1.9
With 100 employees or more ----- do. -----	32	Purchased fuels consumed ----- do. -----	81.4
All employees:		Purchased electric energy:	
Average for year ----- 1,000 -----	13.4	Quantity ----- mil. kWh -----	85.4
Payroll for year ----- mil. dol. -----	524.8	Cost ----- mil. dol. -----	4.4
		Electric energy generated less sold ----- mil. kWh -----	393.4
		Contract work ----- mil. dol. -----	1 233.5
Production, development, and exploration workers:		Cost of purchased communication services ----- do. -----	7.4
Average for year ----- 1,000 -----	9.1	Value of shipments and receipts ----- do. -----	13 782.5
March ----- do. -----	9.6	Value of resales ----- do. -----	3.1
May ----- do. -----	9.4	Capital expenditures during year (except land and mineral rights) ----- do. -----	3 241.7
August ----- do. -----	9.1	New capital expenditures during year ----- do. -----	1 449.8
November ----- do. -----	8.3	Buildings and other structures, except land ----- do. -----	(D)
Hours ----- millions -----	21.2	Machinery and equipment ----- do. -----	(D)
January to March ----- do. -----	5.7	Used capital expenditures during year ----- do. -----	3.7
April to June ----- do. -----	5.5	Buildings and other structures, except land ----- do. -----	.1
July to September ----- do. -----	5.3	Machinery and equipment ----- do. -----	3.8
October to December ----- do. -----	4.7	Mineral exploration and development <sup>1</sup> ----- do. -----	1 788.2
Wages ----- mil. dol. -----	327.0	Rental payments during year ----- do. -----	69.8
Supplemental labor costs not included in payroll ----- do. -----	113.4	Buildings and other structures, except land ----- do. -----	11.3
Legally required expenditures, including Social Security contributions ----- do. -----	51.2	Machinery and equipment ----- do. -----	58.5
Payments for voluntary programs ----- do. -----	62.2	Expensed mineral exploration, development, land, and rights <sup>1 2</sup> ----- do. -----	478.1
Value added by mining ----- do. -----	14 093.2		

<sup>1</sup>Excludes data for mining service industries and natural gas liquids industry where data were not collected.

<sup>2</sup>Excludes data for mineral land and rights for the crude petroleum and natural gas industry where data were not collected.

**Table 4b. Inventories for the State: End of 1981 and 1982**

[Million dollars. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	End of 1981	End of 1982
Total inventories <sup>1</sup> -----	352.5	407.9
Detail by method of valuation:		
Subject to LIFO costing <sup>2</sup> -----	13.0	12.2
LIFO reserve -----	(D)	(D)
LIFO value -----	(D)	(D)
Not subject to LIFO costing -----	313.2	366.1
Valuation method not reported <sup>3</sup> -----	26.3	29.6
Amount subject to LIFO reported without associated reserve and value <sup>4</sup> -----	-	-

<sup>1</sup>Beginning in the 1982 economic censuses, all respondents were requested to report their inventories at (the lower of) cost or market prior to adjustment to LIFO cost. This is a change from the 1977 census in which respondents were permitted to value their inventories using any generally accepted accounting method.

<sup>2</sup>Only includes data reported by respondents who (a) indicated amount of inventories subject to LIFO cost, and (b) provided sufficient information to determine associated LIFO reserve and value figures.

<sup>3</sup>Includes data estimated for nonresponse and nonmail administrative records and data reported by respondents who provided total inventory figures without other information.

<sup>4</sup>Includes data reported by respondents who indicated their inventories were subject to LIFO cost but did not provide associated LIFO reserve and value figures.

**Table 5. Industry Group Statistics for Boroughs and Census Areas: 1982 and 1977**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Geographic area and industry group <sup>1</sup>	1982											1977		
		Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)	All employees (1,000)	Value added by mining (million dollars)	
		E <sup>2</sup>	Total (number)	With 20 employees or more (number)	Number: <sup>3</sup> (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)							Wages (million dollars)
	Alaska -----	-	236	88	13.4	524.8	9.1	21.2	327.0	14 093.2	2 931.0	13 782.5	3 241.7	5.5	1 215.9
	Anchorage Borough -----	E5	68	29	2.9	115.2	1.0	2.2	30.5	100.6	80.8	105.3	76.1	1.5	15.7
13	Oil and gas extraction -----	E5	50	24	2.7	109.2	.8	2.0	26.6	92.4	72.7	99.3	65.8	(NA)	(NA)
138	Oil and gas field services -----	E5	35	18	OC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.5	13.8
14	Nonmetallic minerals, except fuels -----	E4	7	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	Fairbanks North Star Borough -----	E3	27	3	.4	9.2	.3	.7	7.3	12.9	(D)	18.0	(D)	(NA)	(NA)
10	Metal mining -----	E2	20	2	.3	8.1	.3	.5	6.4	10.8	(D)	15.2	(D)	(NA)	(NA)
108	Metal mining services -----	-	2	2	BB	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	Juneau Borough -----	E1	6	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)

See footnotes at end of table.



**Table 5. Industry Group Statistics for Boroughs and Census Areas: 1982 and 1977—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Geographic area and industry group <sup>1</sup>	1982											1977		
		E <sup>2</sup>	Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)	All employees (1,000)	Value added by mining (million dollars)
			Total (number)	With 20 employees or more (number)	Number <sup>3</sup> (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						
	Alaska—Con. Kenai Peninsula Borough -----	-	24	12	EE	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.8	117.7
13	Oil and gas extraction -----	-	24	12	EE	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.8	117.3
131	Crude petroleum and natural gas -----	-	8	4	BB	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.1	84.9
132	Natural gas liquids -----	-	2	-	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
138	Oil and gas field services -----	E1	14	8	1.0	34.6	.8	1.8	26.0	93.6	30.3	110.2	13.7	(NA)	(NA)
	North Slope Borough ----	-	53	27	FF	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
13	Oil and gas extraction -----	-	52	27	FF	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
131	Crude petroleum and natural gas -----	-	19	3	EE	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
138	Oil and gas field services -----	-	33	24	5.1	174.6	4.3	10.5	142.9	549.4	200.1	650.3	99.2	(NA)	(NA)
	Yukon-Koyukuk Census Area -----	E1	9	3	.2	7.7	.2	.3	6.6	19.8	(D)	22.8	(D)	(NA)	(NA)
10	Metal mining -----	E5	8	2	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
12	Bituminous coal and lignite mining -----	-	1	1	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
121	Bituminous coal and lignite mining -----	-	1	1	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	Offshore -----	-	24	9	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1.0	353.2
13	Oil and gas extraction -----	-	24	9	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1.0	353.2
131	Crude petroleum and natural gas -----	-	14	3	.3	10.8	.2	.5	8.3	809.1	128.1	385.6	551.7	.4	316.9
138	Oil and gas field services -----	E1	10	6	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.6	36.3

<sup>1</sup>Borough and census area data shown in this table are limited to boroughs and census areas or industry groups with a value of shipments and receipts greater than \$5 million.

<sup>2</sup>Payroll and sales data for some small single-unit companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate items shown for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of figures shown: E1—10 to 19 percent; E2—20 to 29 percent; E3—30 to 39 percent; E4—40 to 49 percent; E5—50 to 59 percent; E6—60 to 69 percent; E7—70 to 79 percent; E8—80 to 89 percent; E9—90 percent or more.

<sup>3</sup>Some data lines with a value of shipments and receipts greater than \$5 million are withheld to avoid disclosing data for individual companies. However, number of establishments is shown and employment size range is indicated by one of the following symbols: ZZ—less than 100 employees; AA—100 to 249 employees; BB—250 to 499 employees; CC—500 to 999 employees; EE—1,000 to 2,499 employees; FF—2,500 employees or more.

**Table 6. Number of Mineral Establishments in Major Groups by Employment Size Class for Boroughs and Census Areas: 1982**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Geographic area and employment size class	All mineral industries	Metal mining (SIC 10)	Anthracite mining (SIC 11)	Bituminous coal and lignite mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)	Geographic area and employment size class	All mineral industries	Metal mining (SIC 10)	Anthracite mining (SIC 11)	Bituminous coal and lignite mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)
<b>Alaska</b> .....	236	53	-	1	164	18	<b>Alaska—Con.</b>						
0 to 4 employees .....	106	32	-	-	63	11	<b>Bethel Census Area</b> .....	2	1	-	-	1	-
5 to 9 employees .....	27	8	-	-	16	3	0 to 19 employees .....	2	1	-	-	1	-
10 to 19 employees .....	15	3	-	-	11	1	<b>Bristol Bay Borough</b> .....	2	-	-	-	2	-
20 to 49 employees .....	38	6	-	-	29	3	0 to 19 employees .....	2	-	-	-	2	-
50 to 99 employees .....	18	-	-	-	18	-	<b>Dillingham Census Area</b> .....	2	-	-	-	2	-
100 to 249 employees .....	20	4	-	1	15	-	0 to 19 employees .....	1	-	-	-	1	-
250 to 499 employees .....	6	-	-	-	6	-	20 to 99 employees .....	1	-	-	-	1	-
500 to 999 employees .....	5	-	-	-	5	-	<b>Fairbanks North Star Borough</b> ..	27	20	-	-	4	3
2,500 employees or more .....	1	-	-	-	1	-	0 to 19 employees .....	24	18	-	-	4	2
<b>Aleutian Islands Census Area</b> ..	1	1	-	-	-	-	20 to 99 employees .....	1	2	-	-	-	1
0 to 19 employees .....	1	1	-	-	-	-	<b>Juneau Borough</b> .....	6	4	-	-	1	1
<b>Anchorage Borough</b> .....	68	11	-	-	50	7	0 to 19 employees .....	5	4	-	-	-	1
0 to 19 employees .....	39	7	-	-	26	6	20 to 99 employees .....	1	-	-	-	-	-
20 to 99 employees .....	25	4	-	-	20	1							
100 to 249 employees .....	2	-	-	-	2	-							
250 employees or more .....	2	-	-	-	2	-							

**Table 6. Number of Mineral Establishments in Major Groups by Employment Size Class for Boroughs and Census Areas: 1982—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Geographic area and employment size class	All mineral industries	Metal mining (SIC 10)	Anthracite mining (SIC 11)	Bituminous coal and lignite mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)	Geographic area and employment size class	All mineral industries	Metal mining (SIC 10)	Anthracite mining (SIC 11)	Bituminous coal and lignite mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)
<b>Alaska—Con.</b>							<b>Alaska—Con.</b>						
<b>Kenai Peninsula Borough -----</b>	<b>24</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>24</b>	<b>-</b>	<b>North Slope Borough—Con.</b>						
0 to 19 employees.....	12	-	-	-	12	-	20 to 99 employees -----	12	-	-	-	12	-
20 to 99 employees -----	8	-	-	-	8	-	100 to 249 employees -----	7	-	-	-	7	-
100 to 249 employees -----	3	-	-	-	3	-	250 employees or more -----	8	-	-	-	8	-
250 employees or more -----	1	-	-	-	1	-	<b>Prince of Wales-Outer Ketchikan Census Area -----</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Ketchikan Gateway Borough ---</b>	<b>2</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	0 to 19 employees.....	1	1	-	-	-	-
0 to 19 employees.....	1	-	-	-	-	1	<b>Skagway-Yakutat-Angoon Census Area -----</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>
100 to 249 employees -----	1	1	-	-	-	-	0 to 19 employees.....	1	-	-	-	-	-
<b>Kobuk Census Area -----</b>	<b>3</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>1</b>	<b>Wade Hampton Census Area ---</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>-</b>
0 to 19 employees.....	3	1	-	-	1	1	0 to 19 employees.....	1	-	-	-	1	-
<b>Matanuska-Susitna Borough ----</b>	<b>5</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>2</b>	<b>Yukon-Koyukuk Census Area --</b>	<b>9</b>	<b>8</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>-</b>
0 to 19 employees.....	4	1	-	-	2	1	0 to 19 employees.....	6	6	-	-	-	-
20 to 99 employees -----	1	-	-	-	-	1	20 to 99 employees -----	2	2	-	-	-	-
<b>Nome Census Area -----</b>	<b>5</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	100 to 249 employees -----	1	-	-	1	-	-
0 to 19 employees.....	4	3	-	-	-	1	<b>Offshore -----</b>	<b>24</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>24</b>	<b>-</b>
100 to 249 employees -----	1	1	-	-	-	-	0 to 19 employees.....	15	-	-	-	15	-
<b>North Slope Borough -----</b>	<b>53</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>52</b>	<b>1</b>	20 to 99 employees -----	5	-	-	-	5	-
0 to 19 employees.....	26	-	-	-	25	1	100 to 249 employees -----	3	-	-	-	3	-
							250 employees or more -----	1	-	-	-	1	-

# California

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# SUMMARY OF FINDINGS

The total value of shipments and receipts for the 2,196 establishments classified in mineral industries in California was \$13,643 million in 1982, or 5 percent of the Nation's total. This compares to \$4,517 million in 1977, when it also was 5 percent of the Nation's total. Value added by mining amounted to \$11,844 million in 1982, and payroll in mining amounted to \$1,466 million. All dollar figures shown are in current dollars for the years specified and have not been adjusted for changes

in price levels. When making comparisons to prior years, users should take into consideration the inflation that has occurred.

Mineral industries employment in California was 51.3 thousand in 1982, or 2 percent of the Nation's total. This is an increase of 47 percent over 1977. The oil and gas extraction industry led all other mineral industries in the State, accounting for approximately 78 percent of the State's mineral industries employment.



Table 1. Historical Statistics for the State: 1982 and Earlier Census Years

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Kind of operation end year	Establishments during year <sup>1</sup>		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)				
Mineral industries:											
1982 <sup>2</sup>	2 196	491	51.3	1 466.2	30.8	63.6	764.1	11 844.3	5 236.7	13 643.0	3 438.1
1977 <sup>2</sup>	1 307	295	34.8	633.8	23.1	45.5	378.9	3 551.6	1 797.5	4 516.7	832.3
1972 <sup>2</sup>	1 179	245	29.0	340.1	19.3	39.1	206.3	1 400.9	631.7	1 785.5	247.2
1967 <sup>2</sup>	1 438	329	35.0	298.1	23.4	48.1	182.2	1 342.2	688.2	1 687.8	342.6
1963	1 734	264	32.9	242.2	24.3	48.8	167.5	1 253.6	542.2	1 569.9	225.9
1958	1 658	266	33.8	211.8	23.5	48.1	130.0	1 225.5	417.1	1 480.2	162.3
Excluding oil and gas extraction industries:											
1982 <sup>2</sup>	500	100	11.1	294.6	7.4	15.0	176.6	776.9	454.0	1 112.1	118.8
1977 <sup>2</sup>	492	101	10.6	184.0	8.1	16.4	133.2	564.7	427.1	849.1	142.7
1972 <sup>2</sup>	528	110	11.7	132.1	8.3	16.9	88.6	305.0	172.8	434.5	43.5
1967 <sup>2</sup>	606	128	12.9	107.7	9.5	19.4	75.2	301.9	123.4	383.2	42.1
1963 <sup>3</sup>	1 044	143	14.1	94.0	11.3	23.7	71.5	264.4	109.0	342.4	30.9
1958 <sup>3</sup>	842	122	11.7	66.5	9.0	20.0	48.6	197.9	73.6	251.5	19.9

Note: For data prior to 1958, see 1963 Census of Mineral Industries, volume II.

<sup>1</sup>Figures for number of establishments are not comparable from year to year due to various methods of collection in the crude petroleum and natural gas and mining services industries. See Introduction for further explanation.

<sup>2</sup>Beginning with 1967, data for single-unit establishments without paid employees were excluded from the census.

<sup>3</sup>Includes data for mining operations at manufacturing locations.

Table 2a. Mineral Establishment Statistics by Industry for the State: 1982 and 1977

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Industry group and industry	1982												1977	
		Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capitel expendi- tures (million dollars)	All em- ployees <sup>2</sup> (1,000)	Value added by mining (million dollars)	
		E <sup>1</sup>	Total (number)	With 20 employees or more (number)	Number <sup>2</sup> (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)							Wages (million dollars)
	All mineral industries ..	-	2 196	491	51.3	1 466.2	30.8	63.6	764.1	11 844.3	5 236.7	13 643.0	3 438.1	34.8	3 551.6
10	Metal mining.....	E2	142	19	EE	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	2.3	97.9
1011	Iron ores.....	-	3	1	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	EE	(D)
104	Gold and silver ores .....	E8	73	8	1.0	21.5	.5	1.1	10.2	35.3	19.7	28.3	26.7	.2	.9
1041	Gold ores .....	E8	64	7	.9	20.3	.5	1.0	9.2	33.7	18.7	26.0	26.4	AA	(D)
1061	Ferroalloy ores, except vanadium .....	-	7	2	BB	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	BB	(D)
109	Miscellaneous metal ores .....	E2	33	7	BB	(D)	.3	.6	6.2	24.4	16.7	37.8	3.3	BB	(D)
1092	Mercury ores and metallic ores, n.e.c. ....	E2	28	5	.4	8.8	.3	.6	6.2	24.4	16.7	37.8	3.3	AA	(D)
1099															
12	Bituminous coal and lignite mining .....	E1	14	2	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
121	Bituminous coal and lignite mining .....	E1	14	2	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
1211	Bituminous coal and lignite .....	-	11	1	BB	(D)	-	-	-	-	-	-	-	(NA)	(NA)
13	Oil and gas extraction .....	-	1 696	391	40.2	1 171.6	23.5	48.6	587.5	11 067.4	4 782.7	12 530.9	3 319.2	24.7	3 040.4
1311	Crude petroleum and natural gas.....	-	669	121	19.9	680.7	7.8	16.1	223.4	9 682.7	3 783.0	10 409.0	3 056.8	13.2	2 662.0
1321	Natural gas liquids .....	-	44	8	.7	23.2	.5	1.2	14.8	256.2	580.1	815.9	20.4	.4	45.9
138	Oil and gas field services .....	E2	983	262	19.6	467.7	15.2	31.4	349.3	1 128.5	419.6	1 306.0	242.1	11.0	332.5
1381	Drilling oil and gas wells .....	E2	203	67	5.9	145.2	4.6	8.7	108.6	386.6	109.0	384.6	111.0	3.5	124.4
1382	Oil and gas field exploration services .....	E4	102	18	1.6	34.2	1.2	2.7	26.6	89.5	39.9	114.7	14.7	.4	11.8
1389	Oil and gas field services, n.e.c. ....	E2	678	177	12.1	288.3	9.4	20.0	214.1	652.3	270.7	806.6	116.3	7.1	196.3
14	Nonmetallic minerals, except fuels .....	-	344	79	8.6	222.6	6.0	12.2	147.7	683.0	384.2	980.2	87.0	7.7	412.0
142	Crushed and broken stone, including riprap .....	-	79	22	EE	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1.2	50.0
1422	Crushed and broken limestone .....	-	26	8	.7	15.2	.4	.8	7.4	34.2	16.5	45.3	5.4	.6	21.0
1423	Crushed and broken granite .....	-	18	5	.3	7.6	.3	.5	6.4	21.1	(D)	31.9	(D)	.1	4.8
1429	Crushed and broken stone, n.e.c. ....	-	35	9	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.5	24.2
144	Sand and gravel .....	E1	180	37	2.5	61.4	1.8	3.5	43.8	158.1	82.4	215.7	24.8	2.8	120.1
1442	Construction sand and gravel .....	E1	168	32	2.2	55.4	1.6	3.0	39.2	138.9	62.5	179.1	22.2	2.5	107.9
1446	Industrial sand .....	-	12	5	.3	6.0	.2	.5	4.6	19.2	19.9	36.5	2.6	.2	12.2

See footnotes at end of table.

**Table 2a. Mineral Establishment Statistics by Industry for the State: 1982 and 1977—Con.**

[For meaning of abbreviations and symbols, see Introductory text. For explanation of terms, see appendix A]

SIC code	Industry group and industry	1982											1977		
		Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expendi- tures (million dollars)	All em- ployees <sup>2</sup> (1,000)	Value added by mining (million dollars)	
		Total (number)	With 20 employees or more (number)	Number <sup>2</sup> (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)							
		E <sup>1</sup>													
14	Nonmetallic minerals, except fuels—Con.														
145	Clay, ceramic, and refractory minerals -----	E3	12	-	.1	2.3	.1	.2	1.8	1.8	1.4	2.9	.4	AA	(D)
147	Chemical and fertilizer mineral mining -----	-	13	8	FF	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	EE	(D)
1474	Potash, soda, and borate minerals -----	-	9	8	FF	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	EE	(D)
149	Miscellaneous nonmetallic minerals -----	-	40	11	1.3	28.9	1.0	1.9	21.4	68.4	46.2	109.6	5.0	EE	(D)
1499	Miscellaneous nonmetallic minerals, n.e.c. -----	-	29	9	1.2	25.8	.9	1.8	19.7	58.2	44.4	98.3	4.3	1.3	36.1

<sup>1</sup>Payroll and sales data for some small single-unit companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate items shown for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of figures shown: E1—10 to 19 percent; E2—20 to 29 percent; E3—30 to 39 percent; E4—40 to 49 percent; E5—50 to 59 percent; E6—60 to 69 percent; E7—70 to 79 percent; E8—80 to 89 percent; E9—90 percent or more.

<sup>2</sup>General statistics for some industries and industry groups are withheld to avoid disclosing data for individual companies. However, for such industries and industry groups with 100 employees or more, number of establishments is shown and employment size range is indicated by one of the following symbols: AA—100 to 249 employees; BB—250 to 499 employees; CC—500 to 999 employees; EE—1,000 to 2,499 employees; FF—2,500 employees or more.

**Table 2b. Mining Activities of Manufacturing Establishments With Associated Mines by Industry for the State: 1982**

[Represents data reported for mining activities by establishments classified in manufacturing industries. Figures may be understated due to use of administrative records and short forms. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Industry group and industry	Establishments during year (number)	Production, development, and exploration workers		Cost of supplies used, etc. (million dollars)	Quantity of production (1,000 s. tons)
		Hours (millions)	Wages (million dollars)		
Nonmetallic mineral mines included in manufactures .....	31	.7	10.1	11.0	(X)
Crushed and broken stone, including riprap .....	13	.5	6.6	7.5	10 550.4
Crushed and broken limestone .....	13	.5	6.6	7.5	10 550.4
Sand and gravel .....	10	.2	2.9	2.6	2 987.9

Note: Industries and industry groups with less than 50 thousand hours for employees engaged in production, development, and exploration work are not shown.

**Table 3. Selected Statistics by Type of Operation and Industry Group for the State: 1982**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Industry group and item	All types of establishments	Producing establishments										Nonproducing establishments	
			Total	Mines only			Mines with preparation plants				Separately operated preparation plants	Undistributed <sup>1</sup>		
				Total	Underground mines	Open pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open pit mines				Combination and other methods
	<b>ALL MINERAL INDUSTRIES</b>													
	Establishments-----number--	2 196	2 141	667	22	32	613	219	9	200	10	45	1 210	55
	Employees-----1,000-----	51.3	51.1	11.8	.3	.2	11.3	7.5	.4	5.6	1.4	.6	31.2	.2
	Value added in mining-----mil. dol.--	11 844.3	11 817.8	9 683.4	8.0	16.7	9 658.6	681.8	8.9	548.3	124.5	262.5	1 190.1	26.6

See footnotes at end of table.



Table 3. **Selected Statistics by Type of Operation and Industry Group for the State: 1982—**  
Con.

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Industry group and item	All types of establishments	Producing establishments										Non-producing establishments	
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants		Undistributed¹
				Total	Underground mines	Open pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open pit mines	Combination and other methods			
10	METAL MINING													
	Establishments.....number...	142	122	13	11	2	-	9	4	5	-	-	100	20
	Employees.....1,000...	(D)	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)	-	-	(D)	(D)
	Value added in mining.....mil. dol...	(D)	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)	-	-	(D)	(D)
101	Iron ores													
	Establishments.....number...	3	3	2	-	2	-	1	-	1	-	-	-	-
	Employees.....1,000...	(D)	(D)	(D)	-	(D)	-	(D)	-	(D)	-	-	-	-
	Value added in mining.....mil. dol...	(D)	(D)	(D)	-	(D)	-	(D)	-	(D)	-	-	-	-
102	Copper ores													
	Establishments.....number...	1	-	-	-	-	-	-	-	-	-	-	-	1
	Employees.....1,000...	(Z)	-	-	-	-	-	-	-	-	-	-	-	(Z)
	Value added in mining.....mil. dol...	-	-	-	-	-	-	-	-	-	-	-	-	-
103	Lead and zinc ores													
	Establishments.....number...	2	2	2	2	-	-	-	-	-	-	-	-	-
	Employees.....1,000...	(D)	(D)	(D)	(D)	-	-	-	-	-	-	-	-	-
	Value added in mining.....mil. dol...	(D)	(D)	(D)	(D)	-	-	-	-	-	-	-	-	-
104	Gold and silver ores													
	Establishments.....number...	73	58	9	9	-	-	5	2	3	-	-	44	15
	Employees.....1,000...	1.0	.9	.1	.1	-	-	.1	(D)	(D)	-	-	.8	.1
	Value added in mining.....mil. dol...	35.3	38.6	1.5	1.5	-	-	14.7	(D)	(D)	-	-	22.4	-3.3
106	Ferroalloy ores, except vanadium													
	Establishments.....number...	7	6	-	-	-	-	2	2	-	-	-	4	1
	Employees.....1,000...	(D)	(D)	-	-	-	-	(D)	(D)	-	-	-	(D)	(Z)
	Value added in mining.....mil. dol...	(D)	(D)	-	-	-	-	-	-	-	-	-	-	-
108	Metal mining services													
	Establishments.....number...	23	23	-	-	-	-	-	-	-	-	-	23	-
	Employees.....1,000...	(D)	(D)	-	-	-	-	-	-	-	-	-	(D)	-
	Value added in mining.....mil. dol...	(D)	(D)	-	-	-	-	-	-	-	-	-	-	-
109	Miscellaneous metal ores													
	Establishments.....number...	33	30	-	-	-	-	1	-	1	-	-	29	3
	Employees.....1,000...	(D)	(D)	-	-	-	-	(D)	-	(D)	-	-	(D)	(D)
	Value added in mining.....mil. dol...	24.4	(D)	-	-	-	-	(D)	-	(D)	-	-	(D)	(D)
12	BITUMINOUS COAL AND LIGNITE MINING													
	Establishments.....number...	14	14	10	10	-	-	-	-	-	-	-	4	-
	Employees.....1,000...	(D)	(D)	(D)	(D)	-	-	-	-	-	-	-	(D)	-
	Value added in mining.....mil. dol...	(D)	(D)	(D)	(D)	-	-	-	-	-	-	-	-	-
121	Bituminous coal and lignite mining													
	Establishments.....number...	14	14	10	10	-	-	-	-	-	-	-	4	-
	Employees.....1,000...	(D)	(D)	(D)	(D)	-	-	-	-	-	-	-	(D)	-
	Value added in mining.....mil. dol...	(D)	(D)	(D)	(D)	-	-	-	-	-	-	-	(D)	-

See footnotes at end of table.



**Table 3. Selected Statistics by Type of Operation and Industry Group for the State: 1982—**  
**Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Industry group and item	All types of establishments	Producing establishments											Nonproducing establishments
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants	Undistributed <sup>1</sup>	
				Total	Underground mines	Open pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open pit mines	Combination and other methods			
13	<b>OIL AND GAS EXTRACTION</b>													
	Establishments.....number...	1 696	1 672	612	-	-	612	-	-	-	-	39	1 021	24
	Employees .....1,000...	40.2	40.1	(D)	-	-	(D)	-	-	-	-	(D)	28.3	.1
	Value added in mining ..... mil. dol...	11 067.4	11 042.7	(D)	-	-	(D)	-	-	-	-	(D)	1 128.5	24.7
131	<b>Crude petroleum and natural gas</b>													
	Establishments.....number...	669	647	612	-	-	612	-	-	-	-	-	35	22
	Employees .....1,000...	19.9	(D)	(D)	-	-	(D)	-	-	-	-	-	(D)	(D)
	Value added in mining ..... mil. dol...	9 682.7	(D)	(D)	-	-	(D)	-	-	-	-	-	-	(D)
132	<b>Natural gas liquids</b>													
	Establishments.....number...	44	42	-	-	-	-	-	-	-	-	39	3	2
	Employees .....1,000...	.7	(D)	-	-	-	-	-	-	-	-	(D)	(D)	(D)
	Value added in mining ..... mil. dol...	256.2	(D)	-	-	-	-	-	-	-	-	(D)	-	(D)
138	<b>Oil and gas field services</b>													
	Establishments.....number...	983	983	-	-	-	-	-	-	-	-	-	983	-
	Employees .....1,000...	19.6	19.6	-	-	-	-	-	-	-	-	-	19.6	-
	Value added in mining ..... mil. dol...	1 128.5	1 128.5	-	-	-	-	-	-	-	-	-	1 128.5	-
14	<b>NONMETALLIC MINERALS, EXCEPT FUELS</b>													
	Establishments.....number...	344	333	32	1	30	1	210	5	195	10	6	85	11
	Employees .....1,000...	8.6	(D)	.4	(D)	(D)	(D)	(D)	(D)	(D)	1.4	(D)	1.3	(D)
	Value added in mining ..... mil. dol...	683.0	(D)	20.9	(D)	(D)	(D)	(D)	(D)	(D)	124.5	(D)	22.5	(D)
141	<b>Dimension stone</b>													
	Establishments.....number...	10	10	9	-	9	-	1	-	1	-	-	-	-
	Employees .....1,000...	.1	.1	(D)	-	(D)	-	(D)	-	(D)	-	-	-	-
	Value added in mining ..... mil. dol...	2.8	2.8	(D)	-	(D)	-	(D)	-	(D)	-	-	-	-
142	<b>Crushed and broken stone, including riprap</b>													
	Establishments.....number...	79	78	3	-	3	-	68	2	66	-	3	4	1
	Employees .....1,000...	(D)	(D)	(D)	-	(D)	-	(D)	(D)	(D)	-	(D)	(D)	(Z)
	Value added in mining ..... mil. dol...	(D)	(D)	(D)	-	(D)	-	(D)	(D)	(D)	-	(D)	-	-
144	<b>Sand and gravel</b>													
	Establishments.....number...	180	175	3	-	2	1	103	3	95	5	2	67	5
	Employees .....1,000...	2.5	(D)	(Z)	-	(D)	(D)	1.8	(D)	1.7	(D)	(D)	.6	(D)
	Value added in mining ..... mil. dol...	158.1	(D)	1.3	-	(D)	(D)	129.9	(D)	124.0	(D)	(D)	20.5	(D)
145	<b>Clay, ceramic, and refractory minerals</b>													
	Establishments.....number...	12	9	4	-	4	-	4	-	4	-	-	1	3
	Employees .....1,000...	.1	.1	(Z)	-	(Z)	-	(Z)	-	(Z)	-	-	(Z)	(Z)
	Value added in mining ..... mil. dol...	1.8	1.8	.6	-	.6	-	1.2	-	1.2	-	-	-	(Z)
147	<b>Chemical and fertilizer mineral mining</b>													
	Establishments.....number...	13	13	5	1	4	-	5	-	1	4	1	2	-
	Employees .....1,000...	(D)	(D)	(D)	(D)	(D)	-	(D)	-	(D)	(D)	(D)	(D)	-
	Value added in mining ..... mil. dol...	(D)	(D)	(D)	(D)	(D)	-	(D)	-	(D)	(D)	(D)	-	-

See footnotes at end of table.

Table 3. Selected Statistics by Type of Operation and Industry Group for the State: 1982—  
Con.

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Industry group and item	All types of establishments	Producing establishments										Nonproducing establishments	
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants		Undistributed¹
				Total	Underground mines	Open pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open pit mines	Combination and other methods			
14	NONMETALLIC MINERALS, EXCEPT FUELS—Con.													
148	Nonmetallic minerals services													
	Establishments.....number..	10	10	-	-	-	-	-	-	-	-	-	10	-
	Employees.....1,000..	.1	.1	-	-	-	-	-	-	-	-	-	.1	-
	Value added in mining..... mil. dol..	2.1	2.1	-	-	-	-	-	-	-	-	-	2.1	-
149	Miscellaneous nonmetallic minerals													
	Establishments.....number..	40	38	8	-	8	-	29	-	28	1	-	1	2
	Employees.....1,000..	1.3	1.3	(Z)	-	(Z)	-	1.2	-	(D)	(D)	-	(Z)	(Z)
	Value added in mining..... mil. dol..	68.4	68.4	3.8	-	3.8	-	64.6	-	(D)	(D)	-	-	-

<sup>1</sup>Includes data for separately operated auxiliary establishments in addition to establishments that were not possible to classify based on the information available.

Table 4a. Summary Statistics for the State: 1982

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1982	Item	1982
Establishments during year.....number..	2 196	Cost of supplies.....mil. dol..	5 236.7
With 0 to 19 employees.....do..	1 705	Supplies used, minerals received, and purchased machinery installed.....do..	2 870.3
With 20 to 99 employees.....do..	394	Resales.....do..	7.7
With 100 employees or more.....do..	97	Purchased fuels consumed.....do..	493.5
All employees:		Purchased electric energy:	
Average for year.....1,000..	51.3	Quantity.....mil. kWh..	6 665.3
Payroll for year.....mil. dol..	1 466.2	Cost.....mil. dol..	397.5
		Electric energy generated less sold.....mil. kWh..	530.2
		Contract work.....mil. dol..	1 467.7
Production, development, and exploration workers:		Cost of purchased communication services.....do..	9.1
Average for year.....1,000..	30.8	Value of shipments and receipts.....do..	13 643.0
March.....do..	31.9	Value of resales.....do..	10.8
May.....do..	31.2	Capital expenditures during year (except land and mineral rights).....do..	3 438.1
August.....do..	30.7	New capital expenditures during year.....do..	1 059.3
November.....do..	29.5	Buildings and other structures, except land.....do..	105.1
Hours.....millions..	63.6	Machinery and equipment.....do..	954.4
January to March.....do..	16.5	Used capital expenditures during year.....do..	39.8
April to June.....do..	15.9	Buildings and other structures, except land.....do..	1.4
July to September.....do..	15.6	Machinery and equipment.....do..	38.3
October to December.....do..	15.4	Mineral exploration and development <sup>1</sup> .....do..	2 338.9
Wages.....mil. dol..	764.1	Rental payments during year.....do..	80.8
Supplemental labor costs not included in payroll.....do..	245.3	Buildings and other structures, except land.....do..	12.8
Legally required expenditures, including Social Security contributions.....do..	104.2	Machinery and equipment.....do..	68.0
Payments for voluntary programs.....do..	141.2	Expensed mineral exploration, development, land, and rights <sup>1 2</sup> .....do..	1 001.8
Value added by mining.....do..	11 844.3		

<sup>1</sup>Excludes data for mining service industries and natural gas liquids industry where data were not collected.

<sup>2</sup>Excludes data for mineral land and rights for the crude petroleum and natural gas industry where data were not collected.



**Table 4b. Inventories for the State: End of 1981 and 1982**

[Million dollars. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	End of 1981	End of 1982
<b>Total inventories<sup>1</sup></b> .....	<b>650.1</b>	<b>611.7</b>
Detail by method of valuation:		
Subject to LIFO costing <sup>2</sup> .....	80.4	71.1
LIFO reserve .....	23.6	25.9
LIFO value .....	56.8	45.3
Not subject to LIFO costing .....	448.0	407.5
Valuation method not reported <sup>3</sup> .....	121.6	132.9
Amount subject to LIFO reported without associated reserve and value <sup>4</sup> .....	.1	.1

<sup>1</sup>Beginning in the 1982 economic censuses, all respondents were requested to report their inventories at (the lower of) cost or market prior to adjustment to LIFO cost. This is a change from the 1977 census in which respondents were permitted to value their inventories using any generally accepted accounting method.

<sup>2</sup>Only includes data reported by respondents who (a) indicated amount of inventories subject to LIFO cost, and (b) provided sufficient information to determine associated LIFO reserve and value figures.

<sup>3</sup>Includes data estimated for nonresponse and nonmail administrative records and data reported by respondents who provided total inventory figures without other information.

<sup>4</sup>Includes data reported by respondents who indicated their inventories were subject to LIFO cost but did not provide associated LIFO reserve and value figures.

**Table 5. Industry Group Statistics for Counties: 1982 and 1977**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Geographic area and industry group <sup>1</sup>	1982												1977	
		E <sup>2</sup>	Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)	All employees (1,000)	Value added by mining (million dollars)
			Total (number)	With 20 employees or more (number)	Number <sup>3</sup> (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						
	California .....	-	2 196	491	51.3	1 466.2	30.8	63.6	764.1	11 844.3	5 236.7	13 643.0	3 438.1	34.8	3 551.6
	Alameda County .....	E3	33	9	.7	20.5	.4	.8	10.1	39.4	14.0	50.1	3.3	.4	18.4
10	Metals mining .....	E9	3	1	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
104	Gold and silver ores .....	E9	1	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
13	Oil and gas extraction .....	E9	15	2	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
131	Crude petroleum and natural gas .....	E9	7	1	.1	2.8	.1	.1	1.9	6.7	(D)	9.4	(D)	(NA)	(NA)
14	Nonmetallic minerals, except fuels .....	-	14	6	.4	12.7	.2	.5	6.5	25.9	10.3	33.5	2.8	.4	15.8
142	Crushed and broken stone, including riprap .....	-	6	2	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
144	Sand and gravel .....	-	6	4	.3	7.8	.2	.4	5.5	22.0	(D)	26.9	(D)	.2	9.0
	Amador County .....	E1	4	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
14	Nonmetallic minerals, except fuels .....	E1	3	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
144	Sand and gravel .....	-	2	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	Butte County .....	E5	11	-	(Z)	.2	(Z)	(Z)	.2	6.1	3.2	9.1	.1	(NA)	(NA)
13	Oil and gas extraction .....	E5	10	-	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
131	Crude petroleum and natural gas .....	E5	5	-	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	Calaveras County .....	E1	10	2	BB	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.6	14.6
14	Nonmetallic minerals, except fuels .....	-	2	1	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
149	Miscellaneous nonmetallic minerals .....	-	1	1	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	Colusa County .....	-	28	1	.1	2.8	.1	.1	2.2	39.7	26.7	24.0	42.4	(NA)	(NA)
13	Oil and gas extraction .....	-	28	1	.1	2.8	.1	.1	2.2	39.7	26.7	24.0	42.4	(NA)	(NA)
131	Crude petroleum and natural gas .....	-	16	-	(Z)	(Z)	(Z)	(Z)	(Z)	35.3	24.6	18.9	41.0	(NA)	(NA)
138	Oil and gas field services .....	-	12	1	.1	2.8	.1	.1	2.2	4.4	2.1	5.1	1.4	(NA)	(NA)
	Contra Costa County .....	-	30	7	.3	8.0	.2	.4	6.2	60.8	19.9	68.8	12.0	.3	13.6
13	Oil and gas extraction .....	-	21	2	.1	3.3	.1	.1	2.2	48.9	(D)	51.0	(D)	(NA)	(NA)
131	Crude petroleum and natural gas .....	-	9	1	.1	2.4	.1	.1	1.5	47.2	(D)	48.7	(D)	(NA)	(NA)
14	Nonmetallic minerals, except fuels .....	-	6	4	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.1	6.8
142	Crushed and broken stone, including riprap .....	-	3	3	.1	2.6	.1	.1	2.2	6.8	(D)	10.6	(D)	(NA)	(NA)
144	Sand and gravel .....	E1	3	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	El Dorado County .....	-	8	1	.1	2.4	.1	.2	1.8	8.4	(D)	9.5	(D)	(NA)	(NA)

See footnotes at end of table.



Table 5. Industry Group Statistics for Counties: 1982 and 1977—Con.

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Geographic area and industry group <sup>1</sup>	1982												1977	
		E <sup>2</sup>	Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)	All employees (1,000)	Value added by mining (million dollars)
			Total (number)	With 20 employees or more (number)	Number <sup>3</sup> (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						
	<b>California—Con.</b>														
	<b>Fresno County</b> .....	E1	62	17	1.4	31.2	1.1	2.2	24.1	353.4	224.9	438.7	139.8	.7	79.3
10	Metal mining .....	-	4	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
106	Ferroalloy ores, except vanadium .....	-	1	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
13	Oil and gas extraction .....	E1	50	16	1.2	27.7	1.0	1.9	21.0	343.7	221.2	425.7	139.1	.5	73.2
131	Crude petroleum and natural gas .....	-	17	5	.3	8.2	.2	.4	5.1	279.9	148.0	301.7	126.2	.2	60.6
132	Natural gas liquids .....	-	1	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
138	Oil and gas field services .....	E4	32	10	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	<b>Glenn County</b> .....	-	23	-	(Z)	1.0	(Z)	(Z)	.6	19.1	8.2	17.9	9.4	(Z)	18.4
13	Oil and gas extraction .....	-	21	-	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	18.4
131	Crude petroleum and natural gas .....	-	13	-	(Z)	.5	(Z)	(Z)	.2	18.2	7.5	16.8	9.0	(Z)	17.1
	<b>Humboldt County</b> .....	-	10	-	(Z)	.8	(Z)	.1	.7	7.5	3.6	7.2	3.9	(NA)	(NA)
13	Oil and gas extraction .....	-	10	-	(Z)	.8	(Z)	.1	.7	7.5	3.6	7.2	3.9	(NA)	(NA)
131	Crude petroleum and natural gas .....	-	4	-	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	<b>Imperial County</b> .....	-	11	3	.1	2.8	.1	.2	2.3	5.9	2.8	7.5	1.2	(NA)	(NA)
13	Oil and gas extraction .....	-	9	3	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
138	Oil and gas field services .....	-	7	3	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	<b>Inyo County</b> .....	E1	15	3	.6	13.8	.5	.9	11.2	13.5	(D)	30.2	(D)	(NA)	(NA)
10	Metal mining .....	E1	4	2	BB	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
106	Ferroalloy ores, except vanadium .....	-	1	1	BB	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
14	Nonmetallic minerals, except fuels .....	-	9	1	BB	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
147	Chemical and fertilizer mineral mining .....	-	2	1	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	<b>Kern County</b> .....	-	440	140	14.2	368.7	10.5	21.5	253.0	5 854.8	2 308.4	6 691.4	1 471.6	9.2	1 655.7
13	Oil and gas extraction .....	-	419	136	FF	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
131	Crude petroleum and natural gas .....	-	109	30	5.1	155.5	3.1	6.2	84.7	4 993.6	1 754.4	5 383.9	1 364.1	4.2	1 347.3
132	Natural gas liquids .....	-	13	3	BB	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
138	Oil and gas field services .....	E3	297	103	7.5	168.4	6.1	12.4	133.6	424.3	152.9	494.1	83.0	3.8	127.1
14	Nonmetallic minerals, except fuels .....	-	15	4	EE	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
144	Sand and gravel .....	E3	8	-	.1	1.3	.1	.1	1.3	4.3	1.7	5.6	.4	(NA)	(NA)
147	Chemical and fertilizer mineral mining .....	-	1	1	EE	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
149	Miscellaneous nonmetallic minerals .....	-	4	3	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	<b>Kings County</b> .....	-	27	4	.3	7.0	.2	.4	5.3	41.0	25.4	30.7	35.7	.2	13.2
13	Oil and gas extraction .....	-	27	4	.3	7.0	.2	.4	5.3	41.0	25.4	30.7	35.7	.2	13.2
132	Natural gas liquids .....	-	1	-	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
138	Oil and gas field services .....	-	18	3	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	<b>Lake County</b> .....	-	18	5	.2	4.1	.2	.3	3.6	14.5	4.3	15.1	3.7	(NA)	(NA)
13	Oil and gas extraction .....	-	11	4	.2	3.6	.2	.3	3.2	13.8	3.8	14.0	3.7	(NA)	(NA)
138	Oil and gas field services .....	-	10	4	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	<b>Los Angeles County</b> .....	E1	346	72	8.0	259.3	4.0	8.8	106.9	1 552.2	750.6	2 001.6	301.2	7.5	451.4
10	Metal mining .....	E9	22	1	.2	3.6	.1	.3	3.0	6.5	5.5	10.7	1.4	(NA)	(NA)
13	Oil and gas extraction .....	E1	283	55	6.6	219.9	3.2	7.2	90.6	1 507.9	719.9	1 931.6	296.2	6.6	422.2
131	Crude petroleum and natural gas .....	E1	155	25	4.3	155.2	1.5	3.4	43.4	1 362.9	581.0	1 676.1	267.7	3.0	340.2
132	Natural gas liquids .....	-	11	1	.1	2.8	(Z)	.1	1.0	20.2	(D)	91.7	(D)	.1	2.2
138	Oil and gas field services .....	E4	117	29	2.2	61.9	1.7	3.7	46.1	124.8	(D)	163.8	(D)	3.6	79.7
14	Nonmetallic minerals, except fuels .....	E1	38	16	1.3	35.7	.7	1.3	13.3	37.7	25.1	59.2	3.6	.8	27.7
142	Crushed and broken stone, including riprap .....	E1	11	7	.3	5.7	.3	.6	4.6	10.6	10.2	20.0	.8	.1	6.3
144	Sand and gravel .....	E1	20	8	.5	15.1	.3	.7	8.1	25.0	13.8	36.1	2.7	.6	19.3

See footnotes at end of table.

**Table 5. Industry Group Statistics for Counties: 1982 and 1977—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Geographic area and industry group <sup>1</sup>	1982											1977		
		E <sup>2</sup>	Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expendi- tures (million dollars)	All em- ployees (1,000)	Value added by mining (million dollars)
			Total (number)	With 20 employees or more (number)	Number <sup>3</sup> (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						
	California—Con. Marin County .....	E4	9	2	.1	4.2	.1	.3	3.4	12.4	(D)	16.4	(D)	(NA)	(NA)
13	Oil and gas extraction .....	E6	5	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
131	Crude petroleum and natural gas .....	E9	2	-	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
138	Oil and gas field services .....	E1	3	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	Merced County .....	-	11	1	.2	3.2	.1	.2	2.5	14.5	(D)	11.9	(D)	(NA)	(NA)
13	Oil and gas extraction .....	-	6	1	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
138	Oil and gas field services .....	-	3	1	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	Monterey County .....	E3	28	7	.5	13.1	.3	.6	8.1	139.6	(D)	180.9	(D)	.5	82.7
13	Oil and gas extraction .....	E3	22	5	.4	10.7	.3	.5	6.4	134.7	(D)	173.9	(D)	(NA)	(NA)
131	Crude petroleum and natural gas .....	E3	11	3	.3	8.5	.2	.3	4.7	129.6	(D)	168.4	(D)	(NA)	(NA)
138	Oil and gas field services .....	E1	11	2	.1	2.2	.1	.2	1.7	5.0	1.6	5.5	1.1	(NA)	(NA)
14	Nonmetallic minerals, except fuels .....	-	6	2	.1	2.4	.1	.1	1.7	4.9	(D)	7.0	(D)	(NA)	(NA)
	Napa County .....	E4	7	2	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	Nevada County .....	E3	15	1	.1	3.5	.1	.2	3.1	8.1	3.6	10.3	1.4	(NA)	(NA)
	Orange County .....	E2	159	37	4.5	128.8	2.2	4.5	55.8	478.7	205.8	538.7	145.7	2.3	125.0
13	Oil and gas extraction .....	E2	129	29	4.1	119.4	1.9	4.0	50.8	465.2	195.3	516.3	144.2	2.1	112.1
131	Crude petroleum and natural gas .....	E2	64	10	1.6	53.5	.6	1.1	16.1	340.5	145.9	374.1	112.3	1.6	92.1
132	Natural gas liquids .....	-	6	2	.2	7.0	(Z)	.1	1.5	20.5	13.0	31.8	1.7	(Z)	5.6
138	Oil and gas field services .....	E4	59	17	2.3	59.0	1.3	2.8	33.2	104.2	36.4	110.4	30.2	.5	14.3
14	Nonmetallic minerals, except fuels .....	E3	19	7	.3	8.3	.2	.4	4.0	11.4	9.9	19.9	1.3	(NA)	(NA)
144	Sand and gravel .....	E1	14	5	.2	4.7	.1	.3	3.3	8.9	7.1	15.2	.8	.2	12.5
	Riverside County .....	E1	27	3	.3	7.9	.2	.4	5.9	31.2	16.2	45.4	2.0	1.4	50.1
10	Metal mining .....	E1	5	1	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
101	Iron ores .....	E1	2	1	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
14	Nonmetallic minerals, except fuels .....	E1	12	2	.1	3.7	.1	.2	3.0	11.5	4.0	14.2	1.3	(NA)	(NA)
142	Crushed and broken stone, including riprap .....	E2	6	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
144	Sand and gravel .....	-	5	1	.1	1.7	(Z)	.1	1.3	5.3	3.1	7.8	.6	.1	5.4
	Sacramento County .....	E2	42	5	.3	8.1	.2	.4	5.6	50.7	21.9	57.2	15.4	.4	10.4
13	Oil and gas extraction .....	E2	29	2	.2	4.9	.1	.2	2.8	41.7	17.5	46.0	13.2	.4	9.7
131	Crude petroleum and natural gas .....	-	13	1	.1	1.9	(Z)	.4	34.8	13.9	37.2	11.6	.3	.7	7.5
138	Oil and gas field services .....	E8	16	1	.1	3.0	.1	.2	2.4	6.9	3.6	8.8	1.7	(NA)	(NA)
14	Nonmetallic minerals, except fuels .....	-	7	2	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
144	Sand and gravel .....	-	5	2	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	San Benito County .....	-	8	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
13	Oil and gas extraction .....	-	3	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
131	Crude petroleum and natural gas .....	-	2	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	San Bernardino County ..	-	48	9	2.0	55.3	1.4	3.4	39.9	169.0	151.7	285.5	35.2	1.8	87.8
10	Metal mining .....	-	9	1	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
109	Miscellaneous metal ores .....	-	2	1	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
14	Nonmetallic minerals, except fuels .....	-	29	8	1.7	48.8	1.2	2.9	34.6	146.9	(D)	250.9	(D)	(NA)	(NA)
142	Crushed and broken stone, including riprap .....	-	11	2	BB	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.3	10.6
144	Sand and gravel .....	-	8	1	.1	1.8	.1	.1	1.3	5.3	2.1	7.1	.2	(NA)	(NA)
147	Chemical and fertilizer mineral mining .....	-	5	4	EE	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
149	Miscellaneous nonmetallic minerals .....	-	2	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)

See footnotes at end of table.



**Table 5. Industry Group Statistics for Counties: 1982 and 1977—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Geographic area and industry group <sup>1</sup>	1982												1977	
		E <sup>2</sup>	Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)	All employees (1,000)	Value added by mining (million dollars)
			Total (number)	With 20 employees or more (number)	Number <sup>3</sup> (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						
	<b>California—Con.</b>														
	<b>San Diego County</b> .....	E4	58	8	.5	10.9	.4	.7	8.4	44.3	21.2	55.2	10.3	.5	18.4
13	Oil and gas extraction .....	E9	25	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
131	Crude petroleum and natural gas .....	E9	10	—	(Z)	.3	(Z)	(Z)	.2	7.4	(D)	10.8	(D)	(NA)	(NA)
138	Oil and gas field services .....	E8	15	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
14	Nonmetallic minerals, except fuels .....	E1	28	7	.4	8.7	.3	.6	6.8	32.9	14.3	39.0	8.2	.4	15.4
142	Crushed and broken stone, including riprap .....	—	5	1	.1	1.9	.1	.1	1.6	5.8	(D)	7.7	(D)	(NA)	(NA)
144	Sand and gravel .....	E1	15	5	.3	5.8	.2	.4	4.5	22.8	(D)	25.7	(D)	.3	12.7
	<b>San Francisco County</b> ...	E9	36	15	6.0	226.4	.3	.7	6.0	40.8	16.4	54.2	3.0	.8	18.7
13	Oil and gas extraction .....	E9	30	11	FF	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.5	17.6
131	Crude petroleum and natural gas .....	E9	20	8	4.8	186.3	(Z)	(Z)	.6	22.1	(D)	31.1	(D)	(NA)	(NA)
138	Oil and gas field services .....	E9	10	3	BB	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	<b>San Joaquin County</b> .....	E1	33	3	.2	4.2	.1	.3	3.4	93.7	17.9	101.1	10.5	.1	35.1
13	Oil and gas extraction .....	—	22	2	.1	1.8	.1	.1	1.3	88.5	15.3	93.8	10.0	(NA)	(NA)
131	Crude petroleum and natural gas .....	—	12	1	(Z)	.9	(Z)	(Z)	.7	86.5	14.5	91.3	9.7	(NA)	(NA)
14	Nonmetallic minerals, except fuels .....	E1	8	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
144	Sand and gravel .....	—	6	1	.1	2.3	.1	.1	2.0	3.8	2.3	5.8	.4	(NA)	(NA)
	<b>San Luis Obispo County</b> ..	E1	34	7	.3	6.5	.3	.5	5.1	57.7	15.0	64.6	8.1	.1	20.9
13	Oil and gas extraction .....	E1	27	7	.3	5.6	.2	.4	4.4	54.2	14.1	60.5	7.8	.1	19.6
131	Crude petroleum and natural gas .....	—	9	2	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
138	Oil and gas field services .....	E2	18	5	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	<b>San Mateo County</b> .....	E4	19	2	.1	4.2	.1	.1	2.0	10.0	4.1	12.4	1.7	(NA)	(NA)
13	Oil and gas extraction .....	E4	14	2	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
138	Oil and gas field services .....	E2	10	1	(Z)	1.3	(Z)	.1	.8	5.9	1.8	6.6	1.1	(NA)	(NA)
	<b>Santa Barbara County</b> ...	E1	92	24	2.3	61.5	1.7	3.5	46.0	470.6	233.7	574.1	130.3	2.0	113.8
13	Oil and gas extraction .....	E1	81	20	EE	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
131	Crude petroleum and natural gas .....	E1	29	6	.7	21.1	.5	1.0	13.5	383.5	152.2	420.6	115.1	.6	72.4
132	Natural gas liquids .....	—	6	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	4.2
138	Oil and gas field services .....	E1	46	13	.8	22.2	.7	1.6	19.0	52.0	18.6	58.7	11.8	(NA)	(NA)
14	Nonmetallic minerals, except fuels .....	—	11	4	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
149	Miscellaneous nonmetallic minerals .....	—	3	3	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	<b>Santa Clara County</b> .....	E3	24	3	.2	7.1	.1	.2	2.4	15.3	6.2	19.9	1.7	.2	9.5
13	Oil and gas extraction .....	E5	14	2	.1	3.9	.1	.1	1.3	8.9	3.1	10.7	1.3	(NA)	(NA)
138	Oil and gas field services .....	E3	7	1	.1	1.8	(Z)	.1	1.1	7.1	2.1	8.1	1.2	(NA)	(NA)
14	Nonmetallic minerals, except fuels .....	E1	6	—	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.1	3.9
142	Crushed and broken stone, including riprap .....	—	3	—	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	<b>Santa Cruz County</b> .....	—	7	2	.1	4.1	.1	.2	3.3	11.1	(D)	20.0	(D)	.1	6.1
14	Nonmetallic minerals, except fuels .....	—	5	2	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
142	Crushed and broken stone, including riprap .....	—	1	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
144	Sand and gravel .....	—	4	1	.1	1.5	(Z)	.1	1.2	6.2	(D)	8.6	(D)	(NA)	(NA)
	<b>Shasta County</b> .....	E3	11	2	.1	1.8	.1	.2	1.1	8.1	3.0	9.9	1.2	(NA)	(NA)
13	Oil and gas extraction .....	E3	4	2	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
138	Oil and gas field services .....	E3	3	2	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	<b>Sierra County</b> .....	—	7	3	.1	3.8	.1	.3	2.7	12.8	3.0	13.7	2.1	(NA)	(NA)
13	Oil and gas extraction .....	—	3	2	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
138	Oil and gas field services .....	—	2	2	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)

See footnotes at end of table.



**Table 5. Industry Group Statistics for Counties: 1982 and 1977—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Geographic area and industry group <sup>1</sup>	1982											1977	
		Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)	All employees (1,000)	Value added by mining (million dollars)
		E <sup>2</sup>	Total (number)	With 20 employees or more (number)	Number <sup>3</sup> (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)					
	<b>California—Con.</b>													
	<b>Solano County</b> .....	-	35	7	.3	8.3	.3	.5	5.7	79.2	23.5	83.5	19.1	.3
13	Oil and gas extraction .....	-	33	7	BB	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
131	Crude petroleum and natural gas .....	-	15	1	.1	2.3	.1	.1	1.6	60.6	16.7	62.4	14.8	.1
138	Oil and gas field services .....	E1	18	6	BB	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	<b>Sonoma County</b> .....	-	24	8	.4	9.9	.3	.6	7.4	49.2	16.4	48.3	17.4	.2
13	Oil and gas extraction .....	-	14	6	.3	7.5	.2	.4	5.6	42.2	(D)	39.5	(D)	(NA)
131	Crude petroleum and natural gas .....	-	2	2	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
138	Oil and gas field services .....	E1	12	4	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
14	Nonmetallic minerals, except fuels .....	-	10	2	.1	2.3	.1	.2	1.8	7.1	(D)	8.7	(D)	(NA)
144	Sand and gravel .....	-	6	2	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	<b>Stanislaus County</b> .....	E7	13	-	.1	1.3	.1	.1	1.1	3.6	2.3	5.1	.8	(NA)
	<b>Sutter County</b> .....	-	20	3	.2	4.1	.1	.2	2.4	19.4	7.8	23.8	3.4	(Z)
13	Oil and gas extraction .....	-	18	2	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
131	Crude petroleum and natural gas .....	-	8	-	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	14.4
138	Oil and gas field services .....	-	10	2	.1	3.3	.1	.2	2.1	9.3	(D)	10.6	(D)	(NA)
	<b>Tehama County</b> .....	-	17	2	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(Z)
13	Oil and gas extraction .....	-	15	2	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
131	Crude petroleum and natural gas .....	-	7	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	<b>Trinity County</b> .....	-	6	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
13	Oil and gas extraction .....	-	2	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
138	Oil and gas field services .....	-	1	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	<b>Tulare County</b> .....	E1	18	1	.1	3.4	.1	.2	3.1	11.0	3.6	13.2	1.4	(NA)
13	Oil and gas extraction .....	-	12	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
138	Oil and gas field services .....	-	11	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	<b>Tuolumne County</b> .....	E2	3	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
13	Oil and gas extraction .....	-	1	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
138	Oil and gas field services .....	-	1	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	<b>Ventura County</b> .....	-	161	41	3.4	93.9	2.5	4.9	60.9	656.2	315.0	727.9	243.2	2.0
13	Oil and gas extraction .....	-	153	39	3.3	90.9	2.4	4.8	59.0	649.5	312.0	719.5	242.0	1.9
131	Crude petroleum and natural gas .....	-	48	14	1.4	47.2	.9	1.8	27.4	526.8	203.2	513.9	216.1	1.2
132	Natural gas liquids .....	-	6	-	.1	1.6	.1	.1	1.5	14.6	65.8	79.6	.9	.4
138	Oil and gas field services .....	E1	99	25	1.8	42.1	1.4	2.8	30.1	108.0	43.1	126.0	25.1	.6
14	Nonmetallic minerals, except fuels .....	E1	7	2	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
	<b>Yolo County</b> .....	-	37	4	.4	8.4	.3	.5	6.4	58.5	18.6	58.3	18.8	.1
13	Oil and gas extraction .....	-	32	4	.3	7.7	.3	.5	5.8	56.6	17.7	55.8	18.5	.1
131	Crude petroleum and natural gas .....	-	15	-	(Z)	1.0	(Z)	(Z)	.4	37.3	13.3	36.2	14.4	(Z)
138	Oil and gas field services .....	-	17	4	.3	6.7	.3	.5	5.4	19.3	4.4	19.6	4.1	.1
	<b>Offshore</b> .....	-	45	16	1.2	36.5	1.0	2.1	28.1	1 157.3	546.2	1 073.7	629.8	1.4
13	Oil and gas extraction .....	-	45	16	1.2	36.5	1.0	2.1	28.1	1 157.3	546.2	1 073.7	629.8	1.4
131	Crude petroleum and natural gas .....	-	20	6	.5	19.2	.4	.8	14.1	1 101.2	521.8	1 004.1	618.9	1.0
138	Oil and gas field services .....	-	25	10	.7	17.4	.6	1.2	14.0	56.1	24.4	69.5	11.0	.4

<sup>1</sup>County data shown in this table are limited to counties or industry groups with a value of shipments and receipts greater than \$5 million.

<sup>2</sup>Payroll and sales data for some small single-unit companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate items shown for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of figures shown: E1—10 to 19 percent; E2—20 to 29 percent; E3—30 to 39 percent; E4—40 to 49 percent; E5—50 to 59 percent; E6—60 to 69 percent; E7—70 to 79 percent; E8—80 to 89 percent; E9—90 percent or more.

<sup>3</sup>Some statistics for counties or industry groups with a value of shipments and receipts greater than \$5 million are withheld to avoid disclosing data for individual companies. However, for such counties and industry groups, number of establishments is shown and employment size range is indicated by one of the following symbols: ZZ—less than 100 employees; AA—100 to 249 employees; BB—250 to 499 employees; CC—500 to 999 employees; EE—1,000 to 2,499 employees; FF—2,500 employees or more.

**Table 6. Number of Mineral Establishments in Major Groups by Employment Size Class for Counties: 1982**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Geographic area and employment size class	All mineral industries	Metal mining (SIC 10)	Anthracite mining (SIC 11)	Bituminous coal and lignite mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)	Geographic area and employment size class	All mineral industries	Metal mining (SIC 10)	Anthracite mining (SIC 11)	Bituminous coal and lignite mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)
<b>California</b> .....	<b>2 196</b>	<b>142</b>	<b>-</b>	<b>14</b>	<b>1 696</b>	<b>344</b>	<b>California—Con.</b>						
0 to 4 employees .....	1 065	83	-	8	867	107	<b>Los Angeles County</b> .....	<b>346</b>	<b>22</b>	<b>-</b>	<b>3</b>	<b>283</b>	<b>38</b>
5 to 9 employees .....	338	23	-	2	234	79	0 to 19 employees .....	274	21	-	3	228	22
10 to 19 employees .....	302	17	-	2	204	79	20 to 99 employees .....	53	1	-	-	38	14
20 to 49 employees .....	254	11	-	-	194	49	100 to 249 employees .....	14	-	-	-	13	1
50 to 99 employees .....	140	4	-	1	117	18	250 employees or more .....	5	-	-	-	4	1
100 to 249 employees .....	68	2	-	-	60	6	<b>Madera County</b> .....	<b>4</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>-</b>
250 to 499 employees .....	18	2	-	1	11	4	0 to 19 employees .....	4	-	-	-	4	-
500 to 999 employees .....	9	-	-	-	8	1	<b>Marin County</b> .....	<b>9</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>5</b>	<b>2</b>
1,000 to 2,499 employees .....	1	-	-	-	-	1	0 to 19 employees .....	7	2	-	-	4	1
2,500 employees or more .....	1	-	-	-	1	-	20 to 99 employees .....	2	-	-	-	1	1
<b>Alameda County</b> .....	<b>33</b>	<b>3</b>	<b>-</b>	<b>1</b>	<b>15</b>	<b>14</b>	<b>Mariposa County</b> .....	<b>4</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2</b>
0 to 19 employees .....	24	2	-	1	13	8	0 to 19 employees .....	4	2	-	-	-	2
20 to 99 employees .....	9	1	-	-	2	6	<b>Mendocino County</b> .....	<b>4</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>2</b>
<b>Alpine County</b> .....	<b>1</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	0 to 19 employees .....	4	-	-	-	2	2
0 to 19 employees .....	1	1	-	-	-	-	<b>Merced County</b> .....	<b>11</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6</b>	<b>5</b>
<b>Amador County</b> .....	<b>4</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>3</b>	0 to 19 employees .....	10	-	-	-	5	5
0 to 19 employees .....	3	-	-	-	1	2	100 to 249 employees .....	1	-	-	-	1	-
20 to 99 employees .....	1	-	-	-	-	1	<b>Modoc County</b> .....	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>
<b>Butte County</b> .....	<b>11</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>10</b>	<b>-</b>	0 to 19 employees .....	1	-	-	-	-	1
0 to 19 employees .....	11	1	-	-	10	-	<b>Mono County</b> .....	<b>6</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4</b>
<b>Calaveras County</b> .....	<b>10</b>	<b>5</b>	<b>-</b>	<b>1</b>	<b>2</b>	<b>2</b>	0 to 19 employees .....	5	2	-	-	-	3
0 to 19 employees .....	8	4	-	1	2	1	20 to 99 employees .....	1	-	-	-	-	1
20 to 99 employees .....	1	1	-	-	-	-	<b>Monterey County</b> .....	<b>28</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>22</b>	<b>6</b>
100 to 249 employees .....	1	-	-	-	-	1	0 to 19 employees .....	21	-	-	-	17	4
<b>Colusa County</b> .....	<b>28</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>28</b>	<b>-</b>	20 to 99 employees .....	6	-	-	-	4	2
0 to 19 employees .....	27	-	-	-	27	-	100 to 249 employees .....	1	-	-	-	1	-
20 to 99 employees .....	1	-	-	-	1	-	<b>Napa County</b> .....	<b>7</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>3</b>	<b>3</b>
<b>Contra Costa County</b> .....	<b>30</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>21</b>	<b>6</b>	0 to 19 employees .....	5	-	-	1	3	1
0 to 19 employees .....	23	2	-	-	19	2	20 to 99 employees .....	2	-	-	-	-	2
20 to 99 employees .....	7	1	-	-	2	4	<b>Nevada County</b> .....	<b>15</b>	<b>9</b>	<b>-</b>	<b>1</b>	<b>1</b>	<b>4</b>
<b>Del Norte County</b> .....	<b>2</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	0 to 19 employees .....	14	9	-	-	1	4
0 to 19 employees .....	2	1	-	-	-	1	20 to 99 employees .....	1	-	-	1	-	-
<b>El Dorado County</b> .....	<b>8</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>4</b>	<b>Orange County</b> .....	<b>159</b>	<b>10</b>	<b>-</b>	<b>1</b>	<b>129</b>	<b>19</b>
0 to 19 employees .....	7	3	-	-	-	4	0 to 19 employees .....	122	9	-	1	100	12
20 to 99 employees .....	1	-	-	-	1	-	20 to 99 employees .....	31	1	-	-	23	7
<b>Fresno County</b> .....	<b>62</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>50</b>	<b>8</b>	100 to 249 employees .....	1	-	-	-	1	-
0 to 19 employees .....	45	3	-	-	34	8	250 employees or more .....	5	-	-	-	5	-
20 to 99 employees .....	14	1	-	-	13	-	<b>Placer County</b> .....	<b>14</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>9</b>
100 to 249 employees .....	3	-	-	-	3	-	0 to 19 employees .....	14	3	-	-	2	9
<b>Glenn County</b> .....	<b>23</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>21</b>	<b>1</b>	<b>Plumas County</b> .....	<b>7</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>3</b>
0 to 19 employees .....	23	1	-	-	21	1	0 to 19 employees .....	7	3	-	-	1	3
<b>Humboldt County</b> .....	<b>10</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>10</b>	<b>-</b>	<b>Riverside County</b> .....	<b>27</b>	<b>5</b>	<b>-</b>	<b>-</b>	<b>10</b>	<b>12</b>
0 to 19 employees .....	10	-	-	-	10	-	0 to 19 employees .....	24	4	-	-	10	10
<b>Imperial County</b> .....	<b>11</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>9</b>	<b>-</b>	20 to 99 employees .....	2	-	-	-	-	2
0 to 19 employees .....	8	2	-	-	6	-	100 to 249 employees .....	1	1	-	-	-	-
20 to 99 employees .....	3	-	-	-	3	-	<b>Sacramento County</b> .....	<b>42</b>	<b>6</b>	<b>-</b>	<b>-</b>	<b>29</b>	<b>7</b>
<b>Inyo County</b> .....	<b>15</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>9</b>	0 to 19 employees .....	37	5	-	-	27	5
0 to 19 employees .....	12	2	-	-	2	8	20 to 99 employees .....	5	1	-	-	2	2
20 to 99 employees .....	1	1	-	-	-	-	<b>San Benito County</b> .....	<b>8</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3</b>	<b>5</b>
100 to 249 employees .....	1	-	-	-	-	1	0 to 19 employees .....	7	-	-	-	2	5
250 employees or more .....	1	1	-	-	-	-	20 to 99 employees .....	1	-	-	-	1	-
<b>Kern County</b> .....	<b>440</b>	<b>5</b>	<b>-</b>	<b>1</b>	<b>419</b>	<b>15</b>	<b>San Bernardino County</b> .....	<b>48</b>	<b>9</b>	<b>-</b>	<b>-</b>	<b>10</b>	<b>29</b>
0 to 19 employees .....	300	5	-	1	283	11	0 to 19 employees .....	39	8	-	-	10	21
20 to 99 employees .....	108	-	-	-	106	2	20 to 99 employees .....	4	-	-	-	-	4
100 to 249 employees .....	24	-	-	-	23	1	100 to 249 employees .....	2	1	-	-	-	1
250 employees or more .....	8	-	-	-	7	1	250 employees or more .....	3	-	-	-	-	3
<b>Kings County</b> .....	<b>27</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>27</b>	<b>-</b>	<b>San Diego County</b> .....	<b>58</b>	<b>4</b>	<b>-</b>	<b>1</b>	<b>25</b>	<b>28</b>
0 to 19 employees .....	23	-	-	-	23	-	0 to 19 employees .....	50	4	-	-	24	21
20 to 99 employees .....	4	-	-	-	4	-	20 to 99 employees .....	8	-	-	-	1	7
<b>Lake County</b> .....	<b>16</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>11</b>	<b>5</b>	<b>San Francisco County</b> .....	<b>36</b>	<b>4</b>	<b>-</b>	<b>2</b>	<b>30</b>	<b>-</b>
0 to 19 employees .....	11	-	-	-	7	4	0 to 19 employees .....	21	1	-	1	19	-
20 to 99 employees .....	5	-	-	-	4	1	20 to 99 employees .....	6	2	-	-	4	-
<b>Lassen County</b> .....	<b>4</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3</b>	<b>1</b>	100 to 249 employees .....	4	-	-	-	4	-
0 to 19 employees .....	3	-	-	-	3	-	250 employees or more .....	5	1	-	1	3	-
20 to 99 employees .....	1	-	-	-	-	1							



**Table 6. Number of Mineral Establishments in Major Groups by Employment Size Class for Counties: 1982—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Geographic area and employment size class	All mineral industries	Metal mining (SIC 10)	Anthracite mining (SIC 11)	Bituminous coal and lignite mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)	Geographic area and employment size class	All mineral industries	Metal mining (SIC 10)	Anthracite mining (SIC 11)	Bituminous coal and lignite mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)
<b>California—Con.</b>							<b>California—Con.</b>						
<b>San Joaquin County</b> .....	33	3	-	-	22	8	<b>Sonoma County</b> .....	24	-	-	-	14	10
0 to 19 employees .....	30	3	-	-	20	7	0 to 19 employees .....	16	-	-	-	8	8
20 to 99 employees .....	3	-	-	-	2	1	20 to 99 employees .....	8	-	-	-	6	2
<b>San Luis Obispo County</b> .....	34	1	-	-	27	6	<b>Stanislaus County</b> .....	13	-	-	-	6	7
0 to 19 employees .....	27	1	-	-	20	6	0 to 19 employees .....	13	-	-	-	6	7
20 to 99 employees .....	7	-	-	-	7	-	<b>Sutter County</b> .....	20	-	-	-	18	2
<b>San Mateo County</b> .....	19	1	-	1	14	3	0 to 19 employees .....	17	-	-	-	16	1
0 to 19 employees .....	17	1	-	1	12	3	20 to 99 employees .....	3	-	-	-	2	1
20 to 99 employees .....	2	-	-	-	2	-	<b>Tehama County</b> .....	17	1	-	-	15	1
<b>Santa Barbara County</b> .....	92	-	-	-	81	11	0 to 19 employees .....	15	1	-	-	13	1
0 to 19 employees .....	68	-	-	-	61	7	20 to 99 employees .....	2	-	-	-	2	-
20 to 99 employees .....	19	-	-	-	17	2	<b>Trinity County</b> .....	6	2	-	-	2	2
100 to 249 employees .....	4	-	-	-	3	1	0 to 19 employees .....	5	2	-	-	1	2
250 employees or more .....	1	-	-	-	-	1	20 to 99 employees .....	1	-	-	-	1	-
<b>Santa Clara County</b> .....	24	4	-	-	14	6	<b>Tulare County</b> .....	18	1	-	1	12	4
0 to 19 employees .....	21	3	-	-	12	6	0 to 19 employees .....	17	1	-	1	11	4
20 to 99 employees .....	3	1	-	-	2	-	20 to 99 employees .....	1	-	-	-	1	-
<b>Santa Cruz County</b> .....	7	-	-	-	2	5	<b>Tuolumne County</b> .....	3	-	-	-	1	2
0 to 19 employees .....	5	-	-	-	2	3	0 to 19 employees .....	2	-	-	-	-	2
20 to 99 employees .....	2	-	-	-	-	2	20 to 99 employees .....	1	-	-	-	1	-
<b>Shasta County</b> .....	11	2	-	-	4	5	<b>Ventura County</b> .....	161	1	-	-	153	7
0 to 19 employees .....	9	2	-	-	2	5	0 to 19 employees .....	120	1	-	-	114	5
20 to 99 employees .....	2	-	-	-	2	-	20 to 99 employees .....	33	-	-	-	31	2
<b>Sierra County</b> .....	7	4	-	-	3	-	100 to 249 employees .....	7	-	-	-	7	-
0 to 19 employees .....	4	3	-	-	1	-	250 employees or more .....	1	-	-	-	1	-
20 to 99 employees .....	3	1	-	-	2	-	<b>Yolo County</b> .....	37	-	-	-	32	5
<b>Siskiyou County</b> .....	13	4	-	-	3	6	0 to 19 employees .....	33	-	-	-	28	5
0 to 19 employees .....	12	3	-	-	3	6	20 to 99 employees .....	3	-	-	-	3	-
20 to 99 employees .....	1	1	-	-	-	-	100 to 249 employees .....	1	-	-	-	1	-
<b>Solano County</b> .....	35	-	-	-	33	2	<b>Yuba County</b> .....	8	4	-	-	-	4
0 to 19 employees .....	28	-	-	-	26	2	0 to 19 employees .....	6	2	-	-	-	4
20 to 99 employees .....	7	-	-	-	7	-	20 to 99 employees .....	2	2	-	-	-	-
							<b>Offshore</b> .....	45	-	-	-	45	-
							0 to 19 employees .....	29	-	-	-	29	-
							20 to 99 employees .....	13	-	-	-	13	-
							100 to 249 employees .....	3	-	-	-	3	-



# Hawaii

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# SUMMARY OF FINDINGS

The total value of shipments and receipts for the 12 establishments classified in mineral industries in Hawaii was \$13 million in 1982 compared to \$10 million in 1977. Value added by mining amounted to \$10 million in 1982, and payroll in mining amounted to \$4 million. All dollar figures shown are in current dollars for the years specified and have not been adjusted for changes in

price levels. When making comparisons to prior years, users should take into consideration the inflation that has occurred.

Mineral industries employment in Hawaii was .2 thousand in 1982, an increase of 100 percent over 1977. The nonmetallic minerals, except fuels industry led all other mineral industries in the State, accounting for 97 percent of the State's mineral industries employment.

**Table 1. Historical Statistics for the State: 1982 and Earlier Census Years**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Kind of operation and year	Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)				
Mineral industries:											
1982 <sup>1</sup> .....	12	4	.2	3.8	.1	.2	2.6	9.7	5.9	12.8	2.7
1977 <sup>1</sup> .....	7	2	.1	1.9	.1	.2	1.5	8.1	2.9	9.7	1.3
1972 <sup>1</sup> .....	15	5	.3	2.4	.2	.4	1.8	9.0	4.1	11.0	2.0
1967 <sup>1</sup> .....	12	3	.2	1.6	.2	.4	1.3	5.0	2.3	5.5	1.8
1963 .....	44	4	.3	1.7	.2	.6	1.5	4.9	2.1	8.5	.5
1958 .....	20	8	.4	1.7	.4	.7	1.4	4.6	2.0	5.8	.7

Note: For data prior to 1958, see 1963 Census of Mineral Industries, volume II.

<sup>1</sup>Beginning with 1967, data for single-unit establishments without paid employees were excluded from the census.

**Table 2a. Mineral Establishment Statistics by Industry for the State: 1982 and 1977**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Industry group and industry	1982											1977	
		Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)	All employees <sup>2</sup> (1,000)	Value added by mining (million dollars)
		E <sup>1</sup>	Total (number)	With 20 employees or more (number)	Number <sup>2</sup> (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)					
	All mineral industries .....	-	12	4	.2	3.8	.1	.2	2.6	9.7	5.9	12.8	2.7	.1
14	Nonmetallic minerals, except fuels .....	-	8	4	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.1
142	Crushed and broken stone, including riprap .....	-	8	4	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
1429	Crushed and broken stone, n.e.c. ....	-	7	4	.1	3.5	.1	.2	2.5	9.4	5.6	12.2	2.7	(NA)

<sup>1</sup>Payroll and sales data for some small single-unit companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate items shown for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of figures shown: E1—10 to 19 percent; E2—20 to 29 percent; E3—30 to 39 percent; E4—40 to 49 percent; E5—50 to 59 percent; E6—60 to 69 percent; E7—70 to 79 percent; E8—80 to 89 percent; E9—90 percent or more.

<sup>2</sup>General statistics for some industries and industry groups are withheld to avoid disclosing data for individual companies. However, for such industries and industry groups with 100 employees or more, number of establishments is shown and employment size range is indicated by one of the following symbols: AA—100 to 249 employees; BB—250 to 499 employees; CC—500 to 999 employees; EE—1,000 to 2,499 employees; FF—2,500 employees or more.

**Table 2b. Mining Activities of Manufacturing Establishments With Associated Mines by Industry for the State: 1982**

[Represents data reported for mining activities by establishments classified in manufacturing industries. Figures may be understated due to use of administrative records and short forms. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Industry group and industry	Establishments during year (number)	Production, development, and exploration workers		Cost of supplies used, etc. (million dollars)	Quantity of production (1,000 s. tons)
		Hours (millions)	Wages (million dollars)		
Nonmetallic mineral mines included in manufactures .....	4	.1	1.3	.7	(X)
Crushed and broken stone, including riprap .....	2	(D)	(D)	(D)	(D)
Crushed and broken stone, n.e.c. ....	1	(D)	(D)	(D)	(D)

Note: Industries and industry groups with less than 50 thousand hours for employees engaged in production, development, and exploration work are not shown.



**Table 3. Selected Statistics by Type of Operation and Industry Group for the State: 1982**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Industry group and item	All types of estab- lish- ments	Producing establishments											Nonpro- ducing estab- lish- ments
			Total	Mines only				Mines with preparation plants				Sepsa- rately operated prepara- tion plants	Undistri- buted <sup>1</sup>	
				Total	Under- ground mines	Open pit mines	Combina- tion methods, well operations, and other methods	Total	Under- ground mines	Open pit mines	Combina- tion and other methods			
	<b>ALL MINERAL INDUSTRIES</b>													
	Establishments..... number..	12	12	-	-	-	-	8	-	8	-	-	4	-
	Employees.....1,000..	2	2	-	-	-	-	(D)	-	(D)	-	-	(D)	-
	Value added in mining..... mil. dol..	9.7	9.7	-	-	-	-	(D)	-	(D)	-	-	(D)	-
<b>13</b>	<b>OIL AND GAS EXTRACTION</b>													
	Establishments..... number..	4	4	-	-	-	-	-	-	-	-	-	4	-
	Employees.....1,000..	(D)	(D)	-	-	-	-	-	-	-	-	-	(D)	-
	Value added in mining..... mil. dol..	(D)	(D)	-	-	-	-	-	-	-	-	-	(D)	-
<b>138</b>	<b>Oil and gas field services</b>													
	Establishments..... number..	4	4	-	-	-	-	-	-	-	-	-	4	-
	Employees.....1,000..	(D)	(D)	-	-	-	-	-	-	-	-	-	(D)	-
	Value added in mining..... mil. dol..	(D)	(D)	-	-	-	-	-	-	-	-	-	(D)	-
<b>14</b>	<b>NONMETALLIC MINERALS, EXCEPT FUELS</b>													
	Establishments..... number..	8	8	-	-	-	-	8	-	8	-	-	-	-
	Employees.....1,000..	(D)	(D)	-	-	-	-	(D)	-	(D)	-	-	-	-
	Value added in mining..... mil. dol..	(D)	(D)	-	-	-	-	(D)	-	(D)	-	-	-	-
<b>142</b>	<b>Crushed and broken stone, including riprap</b>													
	Establishments..... number..	8	8	-	-	-	-	8	-	8	-	-	-	-
	Employees.....1,000..	(D)	(D)	-	-	-	-	(D)	-	(D)	-	-	-	-
	Value added in mining..... mil. dol..	(D)	(D)	-	-	-	-	(D)	-	(D)	-	-	-	-

<sup>1</sup>Includes data for separately operated auxiliary establishments in addition to establishments that were not possible to classify based on the information available.

**Table 4a. Summary Statistics for the State: 1982**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1982	Item	1982
Establishments during year..... number.....	12	Cost of supplies..... mil. dol.....	5.9
With 0 to 19 employees..... do.....	8	Supplies used, minerals received, and purchased machinery installed..... do.....	4.4
With 20 to 99 employees..... do.....	4	Resales..... do.....	(D)
With 100 employees or more..... do.....	-	Purchased fuels consumed..... do.....	.5
All employees:		Purchased electric energy:	
Average for year..... 1,000.....	.2	Quantity..... mil. kWh.....	15.3
Payroll for year..... mil. dol.....	3.8	Cost..... mil. dol.....	.8
		Electric energy generated less sold..... mil. kWh.....	(D)
		Contract work..... mil. dol.....	(D)
Production, development, and exploration workers:		Cost of purchased communication services..... do.....	(Z)
Average for year..... 1,000.....	.1	Value of shipments and receipts..... do.....	12.8
March..... do.....	.1	Value of resales..... do.....	(D)
May..... do.....	.1		
August..... do.....	.1	Capital expenditures during year (except land and mineral rights)..... do.....	2.7
November..... do.....	.1	New capital expenditures during year..... do.....	(D)
Hours..... millions.....	.2	Buildings and other structures, except land..... do.....	(Z)
January to March..... do.....	.1	Machinery and equipment..... do.....	(D)
April to June..... do.....	.1		
July to September..... do.....	.1	Used capital expenditures during year..... do.....	(D)
October to December..... do.....	.1	Buildings and other structures, except land..... do.....	(Z)
		Machinery and equipment..... do.....	(D)
Wages..... mil. dol.....	2.6	Mineral exploration and development <sup>1</sup> ..... do.....	(Z)
Supplemental labor costs not included in payroll..... do.....	1.0	Rental payments during year..... do.....	(D)
Legally required expenditures, including Social Security contributions..... do.....	.3	Buildings and other structures, except land..... do.....	(Z)
Payments for voluntary programs..... do.....	.7	Machinery and equipment..... do.....	(D)
Value added by mining..... do.....	9.7	Expensed mineral exploration, development, land, and rights <sup>1 2</sup> ..... do.....	(Z)

<sup>1</sup>Excludes data for mining service industries and natural gas liquids industry where data were not collected.

<sup>2</sup>Excludes data for mineral land and rights for the crude petroleum and natural gas industry where data were not collected.

**Table 4b. Inventories for the State: End of 1981 and 1982**

[Million dollars. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	End of 1981	End of 1982
<b>Total inventories<sup>1</sup>.....</b>	<b>2.1</b>	<b>2.0</b>
Detail by method of valuation:		
Subject to LIFO costing <sup>2</sup> .....	(D)	(D)
LIFO reserve.....	-	-
LIFO value.....	(D)	(D)
Not subject to LIFO costing.....	.9	.8
Valuation method not reported <sup>3</sup> .....	(D)	(D)
Amount subject to LIFO reported without associated reserve and value <sup>4</sup> .....	-	-

<sup>1</sup>Beginning in the 1982 economic censuses, all respondents were requested to report their inventories at (the lower of) cost or market prior to adjustment to LIFO cost. This is a change from the 1977 census in which respondents were permitted to value their inventories using any generally accepted accounting method.

<sup>2</sup>Only includes data reported by respondents who (a) indicated amount of inventories subject to LIFO cost, and (b) provided sufficient information to determine associated LIFO reserve and value figures.

<sup>3</sup>Includes data estimated for nonresponse and nonmail administrative records and data reported by respondents who provided total inventory figures without other information.

<sup>4</sup>Includes data reported by respondents who indicated their inventories were subject to LIFO cost but did not provide associated LIFO reserve and value figures.

**Table 5. Industry Group Statistics for Counties: 1982 and 1977**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Geographic area and industry group <sup>1</sup>	1982											1977		
		Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)	All employees (1,000)	Value added by mining (million dollars)	
		E <sup>2</sup>	Total (number)	With 20 employees or more (number)	Number <sup>3</sup> (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)							Wages (million dollars)
14	Hawaii.....	-	12	4	.2	3.8	.1	.2	2.6	9.7	5.9	12.8	2.7	.1	8.1
	Honolulu County .....	-	7	2	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	Nonmetallic minerals, except fuels.....	-	3	2	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
142	Crushed and broken stone, including riprap .....	-	3	2	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)

<sup>1</sup>County data shown in this table are limited to counties or industry groups with a value of shipments and receipts greater than \$5 million.

<sup>2</sup>Payroll and sales data for some small single-unit companies with up to 20 employees (LIFO varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate items shown for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of figures shown: E1-10 to 19 percent; E2-20 to 29 percent; E3-30 to 39 percent; E4-40 to 49 percent; E5-50 to 59 percent; E6-60 to 69 percent; E7-70 to 79 percent; E8-80 to 89 percent; E9-90 percent or more.

<sup>3</sup>Some statistics for counties or industry groups with a value of shipments and receipts greater than \$5 million are withheld to avoid disclosing data for individual companies. However, for such counties and industry groups, number of establishments is shown and employment size range is indicated by one of the following symbols: ZZ-less than 100 employees; AA-100 to 249 employees; BB-250 to 499 employees; CC-500 to 999 employees; EE-1,000 to 2,499 employees; FF-2,500 employees or more.

**Table 6. Number of Mineral Establishments in Major Groups by Employment Size Class for Counties: 1982**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Geographic area and employment size class	All mineral industries	Metal mining (SIC 10)	Anthracite mining (SIC 11)	Bituminous coal and lignite mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)	Geographic area and employment size class	All mineral industries	Metal mining (SIC 10)	Anthracite mining (SIC 11)	Bituminous coal and lignite mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)
<b>Hawaii</b> .....	12	-	-	-	4	8	<b>Hawaii—Con.</b>						
0 to 4 employees .....	6	-	-	-	4	2	<b>Honolulu County</b> .....	7	-	-	-	4	3
5 to 9 employees .....	1	-	-	-	-	1	0 to 19 employees .....	5	-	-	-	4	1
10 to 19 employees .....	1	-	-	-	-	1	20 to 99 employees .....	2	-	-	-	-	2
20 to 49 employees .....	3	-	-	-	-	3	<b>Kauai County</b> .....	2	-	-	-	-	2
50 to 99 employees .....	1	-	-	-	-	1	0 to 19 employees .....	1	-	-	-	-	1
<b>Hawaii County</b> .....	2	-	-	-	-	2	20 to 99 employees .....	1	-	-	-	-	1
0 to 19 employees .....	1	-	-	-	-	1	<b>Maul County</b> .....	1	-	-	-	-	1
20 to 99 employees .....	1	-	-	-	-	1	0 to 19 employees .....	1	-	-	-	-	1



# Oregon

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# SUMMARY OF FINDINGS

The total value of shipments and receipts for the 216 establishments classified in mineral industries in Oregon was \$80 million in 1982 compared to \$76 million in 1977. Value added by mining amounted to \$60 million in 1982, and payroll in mining amounted to \$37 million. All dollar figures shown are in current dollars for the years specified and have not been adjusted for changes in

price levels. When making comparisons to prior years, users should take into consideration the inflation that has occurred.

Mineral industries employment in Oregon was 1.8 thousand in 1982, an increase of 38 percent over 1977. The nonmetallic minerals, except fuels industry led all other mineral industries in the State, accounting for 50 percent of the State's mineral industries employment.



**Table 1. Historical Statistics for the State: 1982 and Earlier Census Years**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Kind of operation and year	Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)				
Mineral industries:											
1982 <sup>1</sup> .....	2216	219	1.8	37.0	1.0	1.9	19.1	60.3	32.6	80.4	12.5
1977 <sup>1</sup> .....	157	18	1.3	20.0	1.0	2.0	14.5	59.1	23.2	76.3	6.0
1972 <sup>1</sup> .....	136	18	1.3	12.9	1.1	2.2	9.8	37.6	15.9	47.9	5.6
1967 <sup>1</sup> .....	160	18	1.4	9.5	1.2	2.4	8.2	27.3	13.5	35.1	5.6
1963 .....	206	22	1.9	11.2	1.6	3.0	8.8	17.7	12.5	25.7	4.4
1958 .....	201	13	1.2	6.3	1.0	2.0	5.0	15.9	10.6	19.9	6.6

Note: For data prior to 1958, see 1963 Census of Mineral Industries, volume II.

<sup>1</sup>Beginning with 1967, data for single-unit establishments without paid employees were excluded from the census.

<sup>2</sup>Not comparable to prior years. See Introduction for further explanation.

**Table 2a. Mineral Establishment Statistics by Industry for the State: 1982 and 1977**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Industry group and industry	1982											1977		
		Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expendi- tures (million dollars)	All em- ployees <sup>2</sup> (1,000)	Value added by mining (million dollars)	
		Total (number)	With 20 employees or more (number)	Number <sup>2</sup> (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)							
E <sup>1</sup>															
	All mineral industries ----	E3	216	19	1.8	37.0	1.0	1.9	19.1	60.3	32.6	80.4	12.5	1.3	59.1
10	Metal mining-----	E4	30	2	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	AA	(D)
12	Bituminous coal and lignite mining -----	E8	3	1	BB	(D)	-	-	-	-	-	-	-	AA	(D)
121	Bituminous coal and lignite mining -----	E8	3	1	BB	(D)	-	-	-	-	-	-	-	AA	(D)
1211	Bituminous coal and lignite -----	E9	2	1	BB	(D)	-	-	-	-	-	-	-	AA	(D)
13	Oil and gas extraction -----	E2	62	4	BB	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
138	Oil and gas field services -----	E1	40	4	BB	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
1382	Oil and gas field exploration services -----	-	14	2	.1	2.2	.1	.2	1.6	5.0	4.5	8.0	1.5	(NA)	(NA)
1389	Oil and gas field services, n.e.c. -----	E2	16	2	.1	2.7	.1	.2	2.0	7.6	1.5	7.7	1.4	(NA)	(NA)
14	Nonmetallic minerals, except fuels -----	E4	121	12	.9	17.4	.7	1.3	12.7	40.6	22.4	57.3	5.8	EE	(D)
142	Crushed and broken stone, including riprap -----	E2	55	5	.4	8.4	.3	.6	6.1	20.2	9.5	27.5	2.2	.5	20.0
1429	Crushed and broken stone, n.e.c. -----	E2	41	4	.3	6.6	.2	.4	4.7	17.5	6.3	22.2	1.5	.4	17.0
144	Sand and gravel -----	E5	51	6	.4	7.3	.3	.6	5.6	17.1	11.5	25.3	3.3	.4	13.2
1442	Construction sand and gravel -----	E5	50	6	BB	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	BB	(D)

<sup>1</sup>Payroll and sales data for some small single-unit companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate items shown for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of figures shown: E1—10 to 19 percent; E2—20 to 29 percent; E3—30 to 39 percent; E4—40 to 49 percent; E5—50 to 59 percent; E6—60 to 69 percent; E7—70 to 79 percent; E8—80 to 89 percent; E9—90 percent or more.

<sup>2</sup>General statistics for some industries and industry groups are withheld to avoid disclosing data for individual companies. However, for such industries and industry groups with 100 employees or more, number of establishments is shown and employment size range is indicated by one of the following symbols: AA—100 to 249 employees; BB—250 to 499 employees; CC—500 to 999 employees; EE—1,000 to 2,499 employees; FF—2,500 employees or more.

**Table 2b. Mining Activities of Manufacturing Establishments With Associated Mines by Industry for the State: 1982**

[Represents data reported for mining activities by establishments classified in manufacturing industries. Figures may be understated due to use of administrative records and short forms. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Industry group and industry	Establishments during year (number)	Production, development, and exploration workers		Cost of supplies used, etc. (million dollars)	Quantity of production (1,000 s. tons)
		Hours (millions)	Wages (million dollars)		
Nonmetallic mineral mines included in manufactures .....	9	.1	1.3	1.3	(X)

Note: Industries and industry groups with less than 50 thousand hours for employees engaged in production, development, and exploration work are not shown.

Table 3. Selected Statistics by Type of Operation and Industry Group for the State: 1982

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Industry group and item	All types of establishments	Producing establishments											Nonproducing establishments
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants	Undistributed <sup>1</sup>	
				Total	Underground mines	Open pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open pit mines	Combination and other methods			
	<b>ALL MINERAL INDUSTRIES</b>													
	Establishments.....number...	216	183	20	2	14	4	62	-	60	2	-	101	33
	Employees.....1,000...	1.8	1.7	.1	(D)	(D)	(D)	(D)	-	(D)	(D)	-	(D)	.1
	Value added in mining.....mil. dol...	60.3	58.7	4.7	(Z)	(D)	(D)	(D)	-	(D)	(D)	-	(D)	1.6
10	<b>METAL MINING</b>													
	Establishments.....number...	30	27	3	1	2	-	-	-	-	-	-	24	3
	Employees.....1,000...	(D)	(D)	(D)	(Z)	(D)	-	-	-	-	-	-	(D)	(D)
	Value added in mining.....mil. dol...	(D)	(D)	(D)	(Z)	(D)	-	-	-	-	-	-	(D)	(D)
101	<b>Iron ores</b>													
	Establishments.....number...	1	1	1	-	1	-	-	-	-	-	-	-	-
	Employees.....1,000...	(D)	(D)	(D)	-	(D)	-	-	-	-	-	-	-	-
	Value added in mining.....mil. dol...	(D)	(D)	(D)	-	(D)	-	-	-	-	-	-	-	-
104	<b>Gold and silver ores</b>													
	Establishments.....number...	12	11	1	1	-	-	-	-	-	-	-	10	1
	Employees.....1,000...	(Z)	(Z)	(Z)	(Z)	-	-	-	-	-	-	-	(Z)	(Z)
	Value added in mining.....mil. dol...	.6	.6	(Z)	(Z)	-	-	-	-	-	-	-	.6	(Z)
106	<b>Ferroalloy ores, except vanadium</b>													
	Establishments.....number...	2	2	1	-	1	-	-	-	-	-	-	1	-
	Employees.....1,000...	(D)	(D)	(D)	-	(D)	-	-	-	-	-	-	(D)	-
	Value added in mining.....mil. dol...	(D)	(D)	(D)	-	(D)	-	-	-	-	-	-	(D)	-
108	<b>Metal mining services</b>													
	Establishments.....number...	5	5	-	-	-	-	-	-	-	-	-	5	-
	Employees.....1,000...	(Z)	(Z)	-	-	-	-	-	-	-	-	-	(Z)	-
	Value added in mining.....mil. dol...	.2	.2	-	-	-	-	-	-	-	-	-	.2	-
109	<b>Miscellaneous metal ores</b>													
	Establishments.....number...	10	8	-	-	-	-	-	-	-	-	-	8	2
	Employees.....1,000...	(Z)	(Z)	-	-	-	-	-	-	-	-	-	(Z)	(Z)
	Value added in mining.....mil. dol...	.9	(D)	-	-	-	-	-	-	-	-	-	(D)	(D)
12	<b>BITUMINOUS COAL AND LIGNITE MINING</b>													
	Establishments.....number...	3	3	1	1	-	-	-	-	-	-	-	2	-
	Employees.....1,000...	(D)	(D)	(D)	(D)	-	-	-	-	-	-	-	(D)	-
	Value added in mining.....mil. dol...	-	-	-	-	-	-	-	-	-	-	-	-	-
121	<b>Bituminous coal and lignite mining</b>													
	Establishments.....number...	3	3	1	1	-	-	-	-	-	-	-	2	-
	Employees.....1,000...	(D)	(D)	(D)	(D)	-	-	-	-	-	-	-	(D)	-
	Value added in mining.....mil. dol...	-	-	-	-	-	-	-	-	-	-	-	-	-

See footnotes at end of table.



**Table 3. Selected Statistics by Type of Operation and Industry Group for the State: 1982—**  
**Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Industry group and item	All types of estab- lish- ments	Producing establishments										Nonpro- ducing estab- lish- ments	
			Total	Mines only				Mines with preparation plants				Sepa- rately opera- ted prepa- ration plants		Undistri- buted¹
				Total	Under- ground mines	Open pit mines	Combina- tion methods, well operations, and other methods	Total	Under- ground mines	Open pit mines	Combina- tion and other methods			
13	<b>OIL AND GAS EXTRACTION</b>													
	Establishments.....number...	62	44	4	-	-	4	-	-	-	-	-	40	18
	Employees .....1,000...	(D)	(D)	(D)	-	-	(D)	-	-	-	-	-	(D)	(D)
	Value added in mining ..... mil. dol...	(D)	(D)	(D)	-	-	(D)	-	-	-	-	-	(D)	(D)
131	<b>Crude petroleum and natural gas</b>													
	Establishments.....number...	22	4	4	-	-	4	-	-	-	-	-	-	18
	Employees .....1,000...	(D)	(D)	(D)	-	-	(D)	-	-	-	-	-	-	(D)
	Value added in mining ..... mil. dol...	(D)	(D)	(D)	-	-	(D)	-	-	-	-	-	-	(D)
138	<b>Oil and gas field services</b>													
	Establishments.....number...	40	40	-	-	-	-	-	-	-	-	-	40	-
	Employees .....1,000...	(D)	(D)	-	-	-	-	-	-	-	-	-	(D)	-
	Value added in mining ..... mil. dol...	(D)	(D)	-	-	-	-	-	-	-	-	-	(D)	-
14	<b>NONMETALLIC MINERALS, EXCEPT FUELS</b>													
	Establishments.....number...	121	109	12	-	12	-	62	-	60	2	-	35	12
	Employees .....1,000...	.9	.9	.1	-	.1	-	(D)	-	(D)	(D)	-	(D)	(Z)
	Value added in mining ..... mil. dol...	40.6	40.6	2.8	-	2.8	-	(D)	-	(D)	(D)	-	(D)	(Z)
141	<b>Dimension stone</b>													
	Establishments.....number...	3	2	2	-	2	-	-	-	-	-	-	-	1
	Employees .....1,000...	(D)	(D)	(D)	-	(D)	-	-	-	-	-	-	-	(Z)
	Value added in mining ..... mil. dol...	(D)	(D)	(D)	-	(D)	-	-	-	-	-	-	-	(Z)
142	<b>Crushed and broken stone, including riprap</b>													
	Establishments.....number...	55	47	3	-	3	-	43	-	42	1	-	1	8
	Employees .....1,000...	.4	.4	(D)	-	(D)	-	(D)	-	(D)	(D)	-	(Z)	(Z)
	Value added in mining ..... mil. dol...	20.2	20.2	(D)	-	(D)	-	(D)	-	(D)	(D)	-	-	-
144	<b>Sand and gravel</b>													
	Establishments.....number...	51	50	6	-	6	-	15	-	14	1	-	29	1
	Employees .....1,000...	.4	.4	(D)	-	(D)	-	(D)	-	(D)	(D)	-	.2	-
	Value added in mining ..... mil. dol...	17.1	17.1	(D)	-	(D)	-	(D)	-	(D)	(D)	-	9.9	-
145	<b>Clay, ceramic, and refractory minerals</b>													
	Establishments.....number...	1	-	-	-	-	-	-	-	-	-	-	-	1
	Employees .....1,000...	(Z)	-	-	-	-	-	-	-	-	-	-	-	(Z)
	Value added in mining ..... mil. dol...	-	-	-	-	-	-	-	-	-	-	-	-	-
148	<b>Nonmetallic minerals services</b>													
	Establishments.....number...	5	5	-	-	-	-	-	-	-	-	-	5	-
	Employees .....1,000...	(D)	(D)	-	-	-	-	-	-	-	-	-	(D)	-
	Value added in mining ..... mil. dol...	(D)	(D)	-	-	-	-	-	-	-	-	-	(D)	-
149	<b>Miscellaneous nonmetallic minerals</b>													
	Establishments.....number...	6	5	1	-	1	-	4	-	4	-	-	-	1
	Employees .....1,000...	.1	(Z)	(Z)	-	(Z)	-	(Z)	-	(Z)	-	-	-	(Z)
	Value added in mining ..... mil. dol...	1.8	1.8	(Z)	-	(Z)	-	1.7	-	1.7	-	-	-	(Z)

<sup>1</sup>Includes data for separately operated auxiliary establishments in addition to establishments that were not possible to classify based on the information available.

**Table 4a. Summary Statistics for the State: 1982**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1982	Item	1982
Establishments during year ----- number .....	216	Cost of supplies ----- mil. dol..	32.6
With 0 to 19 employees ----- do..	197	Supplies used, minerals received, and purchased machinery installed ----- do..	21.3
With 20 to 99 employees ----- do..	18	Resales ----- do..	(Z)
With 100 employees or more ----- do..	1	Purchased fuels consumed ----- do..	4.2
All employees:		Purchased electric energy:	
Average for year ----- 1,000..	1.8	Quantity ----- mil. kWh..	52.2
Payroll for year ----- mil. dol..	37.0	Cost ----- mil. dol..	2.3
		Electric energy generated less sold ----- mil. kWh..	(D)
		Contract work ----- mil. dol..	4.8
Production, development, and exploration workers:		Cost of purchased communication services ----- do..	.1
Average for year ----- 1,000..	1.0	Value of shipments and receipts ----- do..	80.4
March ----- do..	1.1	Value of resales ----- do..	(Z)
May ----- do..	1.0		
August ----- do..	1.0	Capital expenditures during year (except land and mineral rights) ----- do..	12.5
November ----- do..	.9	New capital expenditures during year ----- do..	7.9
Hours ----- millions..	1.9	Buildings and other structures, except land ----- do..	.8
January to March ----- do..	.5	Machinery and equipment ----- do..	7.2
April to June ----- do..	.5		
July to September ----- do..	.5	Used capital expenditures during year ----- do..	1.2
October to December ----- do..	.4	Buildings and other structures, except land ----- do..	(D)
		Machinery and equipment ----- do..	(D)
Wages ----- mil. dol..	19.1	Mineral exploration and development <sup>1</sup> ----- do..	3.4
Supplemental labor costs not included in payroll ----- do..	6.2	Rental payments during year ----- do..	1.1
Legally required expenditures, including Social Security contributions ----- do..	3.2	Buildings and other structures, except land ----- do..	.3
Payments for voluntary programs ----- do..	3.0	Machinery and equipment ----- do..	.9
Value added by mining ----- do..	60.3	Expensed mineral exploration, development, land, and rights <sup>2</sup> ----- do..	4.4

<sup>1</sup>Excludes data for mining service industries and natural gas liquids industry where data were not collected.

<sup>2</sup>Excludes data for mineral land and rights for the crude petroleum and natural gas industry where data were not collected.

**Table 4b. Inventories for the State: End of 1981 and 1982**

[Million dollars. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	End of 1981	End of 1982
Total inventories <sup>1</sup> -----	11.3	12.2
Detail by method of valuation:		
Subject to LIFO costing <sup>2</sup> -----	(D)	(D)
LIFO reserve -----	(D)	(D)
LIFO value -----	(D)	(D)
Not subject to LIFO costing -----	4.0	3.6
Valuation method not reported <sup>3</sup> -----	(D)	(D)
Amount subject to LIFO reported without associated reserve and value <sup>4</sup> -----	-	-

<sup>1</sup>Beginning in the 1982 economic censuses, all respondents were requested to report their inventories at (the lower of) cost or market prior to adjustment to LIFO cost. This is a change from the 1977 census in which respondents were permitted to value their inventories using any generally accepted accounting method.

<sup>2</sup>Only includes data reported by respondents who (a) indicated amount of inventories subject to LIFO cost, and (b) provided sufficient information to determine associated LIFO reserve and value figures.

<sup>3</sup>Includes data estimated for nonresponse and nonmail administrative records and data reported by respondents who provided total inventory figures without other information.

<sup>4</sup>Includes data reported by respondents who indicated their inventories were subject to LIFO cost but did not provide associated LIFO reserve and value figures.

**Table 5. Industry Group Statistics for Counties: 1982 and 1977**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Geographic area and industry group <sup>1</sup>	1982											1977		
		Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expendi- tures (million dollars)	All em- ployees (1,000)	Value added by mining (million dollars)	
		E <sup>2</sup>	Total (number)	With 20 employees or more (number)	Number <sup>3</sup> (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)							Wages (million dollars)
	Oregon -----	E3	216	19	1.8	37.0	1.0	1.9	19.1	60.3	32.6	80.4	12.5	1.3	59.1
	Columbia County -----	-	9	2	.1	2.5	.1	.2	2.0	4.5	6.1	9.0	1.5	(NA)	(NA)
13	Oil and gas extraction -----	-	4	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
138	Oil and gas field services -----	-	3	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	Klamath County -----	E9	3	2	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
14	Nonmetallic minerals, except fuels -----	E9	3	2	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
144	Sand and gravel -----	E9	2	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	Lane County -----	E3	15	3	.2	2.6	.1	.2	1.6	5.4	2.9	7.1	1.2	.1	4.7
14	Nonmetallic minerals, except fuels -----	E3	14	3	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)

See footnotes at end of table.



**Table 5. Industry Group Statistics for Counties: 1982 and 1977—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Geographic area and industry group <sup>1</sup>	1982										1977		
		Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)	All employees (1,000)	Value added by mining (million dollars)
		E <sup>2</sup>	Total (number)	With 20 employees or more (number)	Number <sup>3</sup> (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)					
14	Oregon—Con.	E1	13	3	.1	2.6	.1	.1	1.5	9.1	2.6	11.4	.4	(NA)
	Washington County .....													(NA)
	Nonmetallic minerals, except fuels .....	—	9	3	.1	2.5	.1	.1	1.4	8.9	2.5	11.2	.3	(NA)
142	Crushed and broken stone, including riprap .....	—	7	3	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)

<sup>1</sup>County data shown in this table are limited to counties or industry groups with a value of shipments and receipts greater than \$5 million.

<sup>2</sup>Payroll and sales data for some small single-unit companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate items shown for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of figures shown: E1—10 to 19 percent; E2—20 to 29 percent; E3—30 to 39 percent; E4—40 to 49 percent; E5—50 to 59 percent; E6—60 to 69 percent; E7—70 to 79 percent; E8—80 to 89 percent; E9—90 percent or more.

<sup>3</sup>Some statistics for counties or industry groups with a value of shipments and receipts greater than \$5 million are withheld to avoid disclosing data for individual companies. However, for such counties and industry groups, number of establishments is shown and employment size range is indicated by one of the following symbols: ZZ—less than 100 employees; AA—100 to 249 employees; BB—250 to 499 employees; CC—500 to 999 employees; EE—1,000 to 2,499 employees; FF—2,500 employees or more.

**Table 6. Number of Mineral Establishments in Major Groups by Employment Size Class for Counties: 1982**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Geographic area and employment size class	All mineral industries	Metal mining (SIC 10)	Anthracite mining (SIC 11)	Bituminous coal and lignite mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)	Geographic area and employment size class	All mineral industries	Metal mining (SIC 10)	Anthracite mining (SIC 11)	Bituminous coal and lignite mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)
<b>Oregon .....</b>	<b>216</b>	<b>30</b>	<b>—</b>	<b>3</b>	<b>62</b>	<b>121</b>	<b>Oregon—Con.</b>						
0 to 4 employees .....	135	25	—	1	51	58	Grant County .....	3	1	—	—	2	—
5 to 9 employees .....	41	2	—	1	3	35	0 to 19 employees .....	2	1	—	—	1	—
10 to 19 employees .....	21	1	—	—	4	16	20 to 99 employees .....	1	—	—	—	1	—
20 to 49 employees .....	14	2	—	—	2	10	<b>Hood River County .....</b>	<b>1</b>	<b>1</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
50 to 99 employees .....	4	—	—	—	2	2	0 to 19 employees .....	1	1	—	—	—	—
250 to 499 employees .....	1	—	—	1	—	—	<b>Jackson County .....</b>	<b>11</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>2</b>	<b>9</b>
<b>Baker County .....</b>	<b>19</b>	<b>8</b>	<b>—</b>	<b>—</b>	<b>9</b>	<b>2</b>	0 to 19 employees .....	11	—	—	—	2	9
0 to 19 employees .....	17	7	—	—	9	1	<b>Jefferson County .....</b>	<b>2</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>1</b>	<b>1</b>
20 to 99 employees .....	2	1	—	—	—	1	0 to 19 employees .....	2	—	—	—	1	1
<b>Benton County .....</b>	<b>7</b>	<b>1</b>	<b>—</b>	<b>—</b>	<b>3</b>	<b>3</b>	<b>Josephine County .....</b>	<b>9</b>	<b>5</b>	<b>—</b>	<b>—</b>	<b>2</b>	<b>2</b>
0 to 19 employees .....	7	1	—	—	3	3	0 to 19 employees .....	9	5	—	—	2	2
<b>Clackamas County .....</b>	<b>8</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>2</b>	<b>6</b>	<b>Klamath County .....</b>	<b>3</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>3</b>
0 to 19 employees .....	6	—	—	—	1	5	0 to 19 employees .....	1	—	—	—	—	1
20 to 99 employees .....	2	—	—	—	1	1	20 to 99 employees .....	2	—	—	—	—	2
<b>Clatsop County .....</b>	<b>5</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>4</b>	<b>1</b>	<b>Lake County .....</b>	<b>2</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>2</b>
0 to 19 employees .....	4	—	—	—	3	1	0 to 19 employees .....	1	—	—	—	—	1
20 to 99 employees .....	1	—	—	—	1	—	20 to 99 employees .....	1	—	—	—	—	1
<b>Columbia County .....</b>	<b>9</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>4</b>	<b>5</b>	<b>Lane County .....</b>	<b>15</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>1</b>	<b>14</b>
0 to 19 employees .....	7	—	—	—	3	4	0 to 19 employees .....	12	—	—	—	1	11
20 to 99 employees .....	2	—	—	—	1	1	20 to 99 employees .....	3	—	—	—	—	3
<b>Coos County .....</b>	<b>5</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>1</b>	<b>4</b>	<b>Lincoln County .....</b>	<b>6</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>6</b>
0 to 19 employees .....	5	—	—	—	1	4	0 to 19 employees .....	6	—	—	—	—	6
<b>Crook County .....</b>	<b>2</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>1</b>	<b>1</b>	<b>Linn County .....</b>	<b>12</b>	<b>3</b>	<b>—</b>	<b>—</b>	<b>1</b>	<b>8</b>
0 to 19 employees .....	2	—	—	—	1	1	0 to 19 employees .....	12	3	—	—	1	8
<b>Curry County .....</b>	<b>1</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>1</b>	<b>Malheur County .....</b>	<b>4</b>	<b>2</b>	<b>—</b>	<b>—</b>	<b>1</b>	<b>1</b>
0 to 19 employees .....	1	—	—	—	—	1	0 to 19 employees .....	4	2	—	—	1	1
<b>Deschutes County .....</b>	<b>6</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>2</b>	<b>4</b>	<b>Marion County .....</b>	<b>8</b>	<b>—</b>	<b>—</b>	<b>1</b>	<b>1</b>	<b>6</b>
0 to 19 employees .....	6	—	—	—	2	4	0 to 19 employees .....	8	—	—	1	1	6
<b>Douglas County .....</b>	<b>9</b>	<b>1</b>	<b>—</b>	<b>—</b>	<b>3</b>	<b>5</b>	<b>Morrow County .....</b>	<b>3</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>3</b>	<b>—</b>
0 to 19 employees .....	8	—	—	—	3	5	0 to 19 employees .....	3	—	—	—	—	—
20 to 99 employees .....	1	1	—	—	—	—							
<b>Gilliam County .....</b>	<b>1</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>1</b>	<b>—</b>							
0 to 19 employees .....	1	—	—	—	1	—							



**Table 6. Number of Mineral Establishments in Major Groups by Employment Size Class for Counties: 1982—Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Geographic area and employment size class	All mineral industries	Metal mining (SIC 10)	Anthracite mining (SIC 11)	Bituminous coal and lignite mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)	Geographic area and employment size class	All mineral industries	Metal mining (SIC 10)	Anthracite mining (SIC 11)	Bituminous coal and lignite mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)
<b>Oregon—Con.</b>							<b>Oregon—Con.</b>						
<b>Multnomah County</b> .....	16	5	-	2	4	5	<b>Union County</b> .....	4	2	-	-	2	-
0 to 19 employees.....	15	5	-	1	4	5	0 to 19 employees.....	4	2	-	-	2	-
250 employees or more .....	1	-	-	1	-	-	<b>Wallowa County</b> .....	2	-	-	-	-	2
<b>Polk County</b> .....	4	-	-	-	1	3	0 to 19 employees.....	2	-	-	-	-	2
0 to 19 employees.....	4	-	-	-	1	3	<b>Wasco County</b> .....	3	-	-	-	1	2
<b>Sherman County</b> .....	1	-	-	-	1	-	0 to 19 employees.....	3	-	-	-	1	2
0 to 19 employees.....	1	-	-	-	1	-	<b>Washington County</b> .....	13	-	-	-	4	9
<b>Tillamook County</b> .....	2	-	-	-	-	2	0 to 19 employees.....	10	-	-	-	4	6
0 to 19 employees.....	2	-	-	-	-	2	20 to 99 employees .....	3	-	-	-	-	3
<b>Umatilla County</b> .....	5	-	-	-	3	2	<b>Wheeler County</b> .....	1	-	-	-	1	-
0 to 19 employees.....	5	-	-	-	3	2	0 to 19 employees.....	1	-	-	-	1	-
							<b>Yamhill County</b> .....	14	1	-	-	1	12
							0 to 19 employees.....	14	1	-	-	1	12

# Washington

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# SUMMARY OF FINDINGS

The total value of shipments and receipts for the 242 establishments classified in mineral industries in Washington was \$238 million in 1982 compared to \$133 million in 1977. Value added by mining amounted to \$162 million in 1982, and payroll in mining amounted to \$67 million. All dollar figures shown are in current dollars for the years specified and have not been adjusted for changes in price levels. When making comparisons to prior

years, users should take into consideration the inflation that has occurred.

Mineral industries employment in Washington was 2.8 thousand in 1982, an increase of 40 percent over 1977. The nonmetallic minerals, except fuels industry led all other mineral industries in the State, accounting for 32 percent of the State's mineral industries employment.



**Table 1. Historical Statistics for the State: 1982 and Earlier Census Years**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Kind of operation and year	Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)				
<b>Mineral industries:</b>											
1982 <sup>1</sup> .....	2242	221	2.8	66.8	2.2	4.5	51.4	161.9	119.0	237.5	43.4
1977 <sup>1</sup> .....	199	18	2.0	36.2	1.5	3.1	25.7	84.9	63.8	132.5	16.2
1972 <sup>1</sup> .....	175	21	1.9	18.2	1.6	3.1	14.6	45.9	25.1	56.6	14.5
1967 <sup>1</sup> .....	185	17	1.6	12.6	1.2	2.3	8.8	21.3	15.0	28.7	7.8
1963 .....	248	22	1.9	11.9	1.5	3.0	9.6	24.5	14.4	34.8	4.1
1958 .....	200	28	2.0	10.9	1.6	2.8	7.9	23.9	13.1	34.1	2.8
<b>Excluding oil and gas extraction industries:</b>											
1982 <sup>1</sup> .....	169	16	2.1	51.5	1.6	3.1	39.8	123.7	81.4	189.9	15.2
1977 .....											
1972 .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1967 .....											
1963 .....											
1958 .....											

Note: For data prior to 1958, see 1963 Census of Mineral Industries, volume II.

<sup>1</sup>Beginning with 1967, data for single-unit establishments without paid employees were excluded from the census.

<sup>2</sup>Not comparable to prior years. See Introduction for further explanation.

**Table 2a. Mineral Establishment Statistics by Industry for the State: 1982 and 1977**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Industry group and industry	1982												1977	
		E <sup>1</sup>	Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expendi- tures (million dollars)	All em- ployees <sup>2</sup> (1,000)	Value added by mining (million dollars)
			Total (number)	With 20 employees or more (number)	Number <sup>2</sup> (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						
	<b>All mineral Industries ----</b>	<b>E2</b>	<b>242</b>	<b>21</b>	<b>2.8</b>	<b>66.8</b>	<b>2.2</b>	<b>4.5</b>	<b>51.4</b>	<b>161.9</b>	<b>119.0</b>	<b>237.5</b>	<b>43.4</b>	<b>2.0</b>	<b>84.9</b>
10	<b>Metal mining-----</b>	-	39	5	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	BB	(D)
104	Gold and silver ores -----	E1	11	1	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
1041	Gold ores -----	E1	10	1	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
109	Miscellaneous metal ores -----	-	13	2	BB	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
1094	Uranium-radium-vanadium ores -----	-	5	2	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
12	<b>Bituminous coal and lignite mining -----</b>	-	10	1	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	CC	(D)
121	Bituminous coal and lignite mining -----	-	10	1	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	CC	(D)
1211	Bituminous coal and lignite --	-	6	1	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	CC	(D)
13	<b>Oil and gas extraction -----</b>	<b>E6</b>	<b>73</b>	<b>5</b>	<b>.7</b>	<b>15.3</b>	<b>.6</b>	<b>1.3</b>	<b>11.6</b>	<b>38.2</b>	<b>37.6</b>	<b>47.6</b>	<b>28.2</b>	<b>.2</b>	<b>5.0</b>
138	Oil and gas field services -----	E6	53	5	.7	13.7	.6	1.3	11.5	36.7	(D)	44.7	(D)	.2	4.0
1381	Drilling oil and gas wells -----	E9	14	2	.4	7.8	.4	.9	6.9	21.0	(D)	27.2	(D)	(NA)	(NA)
1389	Oil and gas field services, n.e.c. -----	-	19	2	.1	4.3	.1	.3	3.2	12.1	(D)	12.7	(D)	(NA)	(NA)
14	<b>Nonmetallic minerals, except fuels -----</b>	<b>E2</b>	<b>120</b>	<b>10</b>	<b>.9</b>	<b>17.8</b>	<b>.7</b>	<b>1.3</b>	<b>13.8</b>	<b>44.7</b>	<b>25.1</b>	<b>64.0</b>	<b>5.8</b>	<b>.8</b>	<b>33.8</b>
142	Crushed and broken stone, including riprap -----	E4	32	4	.3	5.5	.2	.4	4.5	12.6	8.2	18.8	2.1	.2	8.9
1429	Crushed and broken stone, n.e.c. -----	E4	20	3	.2	3.6	.1	.3	3.0	8.4	4.5	11.7	1.1	(NA)	(NA)
144	Sand and gravel -----	E2	61	5	.4	8.9	.3	.6	7.0	22.4	11.2	31.1	2.5	.5	20.0
1442	Construction sand and gravel -----	E2	58	3	.3	7.5	.3	.5	6.2	19.7	9.1	26.7	2.1	.4	18.5
149	Miscellaneous nonmetallic minerals -----	E1	10	1	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
1499	Miscellaneous nonmetallic minerals, n.e.c. -----	E1	9	1	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)

<sup>1</sup>Payroll and sales data for some small single-unit companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate items shown for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of figures shown: E1—10 to 19 percent; E2—20 to 29 percent; E3—30 to 39 percent; E4—40 to 49 percent; E5—50 to 59 percent; E6—60 to 69 percent; E7—70 to 79 percent; E8—80 to 89 percent; E9—90 percent or more.

<sup>2</sup>General statistics for some industries and industry groups are withheld to avoid disclosing data for individual companies. However, for such industries and industry groups with 100 employees or more, number of establishments is shown and employment size range is indicated by one of the following symbols: AA—100 to 249 employees; BB—250 to 499 employees; CC—500 to 999 employees; EE—1,000 to 2,499 employees; FF—2,500 employees or more.

**Table 2b. Mining Activities of Manufacturing Establishments With Associated Mines by Industry for the State: 1982**

[Represents data reported for mining activities by establishments classified in manufacturing industries. Figures may be understated due to use of administrative records and short forms. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Industry group and industry	Establishments during year (number)	Production, development, and exploration workers		Cost of supplies used, etc. (million dollars)	Quantity of production (1,000 s. tons)
		Hours (millions)	Wages (million dollars)		
Nonmetallic mineral mines included in manufactures .....	14	.2	3.5	3.0	(X)
Sand and gravel .....	11	.2	3.0	2.1	2 274.7

Note: Industries and industry groups with less than 50 thousand hours for employees engaged in production, development, and exploration work are not shown.

**Table 3. Selected Statistics by Type of Operation and Industry Group for the State: 1982**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Industry group and item	All types of estab- lish- ments	Producing establishments										Nonpro- ducing estab- lish- ments	
			Total	Mines only				Mines with preparation plants				Sepsa- rately operated prepara- tion plants		Undistri- buted¹
				Total	Under- ground mines	Open pit mines	Combina- tion methods, well operations, and other methods	Total	Under- ground mines	Open pit mines	Combina- tion and other methods			
	<b>ALL MINERAL INDUSTRIES</b>													
	Establishments.....number..	242	222	22	8	7	7	65	1	64	-	2	133	20
	Employees .....1,000..	2.8	2.7	(D)	(Z)	(D)	(Z)	1.6	(D)	(D)	-	(D)	1.0	.1
	Value added in mining ..... mil. dol..	161.9	162.5	(D)	3.0	(D)	(D)	108.9	(D)	(D)	-	(D)	46.8	-6
<b>10</b>	<b>METAL MINING</b>													
	Establishments.....number..	39	35	4	4	-	-	4	1	3	-	-	27	4
	Employees .....1,000..	(D)	(D)	(D)	(D)	-	-	(D)	(D)	(D)	-	-	(D)	(D)
	Value added in mining ..... mil. dol..	(D)	(D)	(D)	(D)	-	-	(D)	(D)	(D)	-	-	(D)	(D)
<b>102</b>	<b>Copper ores</b>													
	Establishments.....number..	2	1	-	-	-	-	-	-	-	-	-	1	1
	Employees .....1,000..	(D)	(Z)	-	-	-	-	-	-	-	-	-	(Z)	(D)
	Value added in mining ..... mil. dol..	(D)	-	-	-	-	-	-	-	-	-	-	-	(D)
<b>103</b>	<b>Lead and zinc ores</b>													
	Establishments.....number..	2	1	1	1	-	-	-	-	-	-	-	-	1
	Employees .....1,000..	(Z)	-	-	-	-	-	-	-	-	-	-	-	(Z)
	Value added in mining ..... mil. dol..	(Z)	(Z)	(Z)	(Z)	-	-	-	-	-	-	-	-	(Z)
<b>104</b>	<b>Gold and silver ores</b>													
	Establishments.....number..	11	11	1	1	-	-	1	1	-	-	-	9	-
	Employees .....1,000..	(D)	(D)	(Z)	(Z)	-	-	(D)	(D)	-	-	-	(D)	-
	Value added in mining ..... mil. dol..	(D)	(D)	(Z)	(Z)	-	-	(D)	(D)	-	-	-	(D)	-
<b>108</b>	<b>Metal mining services</b>													
	Establishments.....number..	11	11	-	-	-	-	-	-	-	-	-	11	-
	Employees .....1,000..	(D)	(D)	-	-	-	-	-	-	-	-	-	(D)	-
	Value added in mining ..... mil. dol..	(D)	(D)	-	-	-	-	-	-	-	-	-	(D)	-
<b>109</b>	<b>Miscellaneous metal ores</b>													
	Establishments.....number..	13	11	2	2	-	-	3	-	3	-	-	6	2
	Employees .....1,000..	(D)	(D)	(D)	(D)	-	-	(D)	-	(D)	-	-	(D)	(Z)
	Value added in mining ..... mil. dol..	(D)	(D)	(D)	(D)	-	-	(D)	-	(D)	-	-	(D)	-

See footnotes at end of table.



**Table 3. Selected Statistics by Type of Operation and Industry Group for the State: 1982—**  
**Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Industry group and item	All types of establishments	Producing establishments										Nonproducing establishments	
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants		Undistributed¹
				Total	Underground mines	Open pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open pit mines	Combination and other methods			
12	<b>BITUMINOUS COAL AND LIGNITE MINING</b>													
	Establishments.....number..	10	10	4	4	-	-	1	-	1	-	1	4	-
	Employees.....1,000.....	(D)	(D)	(D)	(D)	-	-	(D)	-	(D)	-	(D)	(D)	-
	Value added in mining.....mil. dol..	(D)	(D)	(D)	(D)	-	-	(D)	-	(D)	-	(D)	(D)	-
121	<b>Bituminous coal and lignite mining</b>													
	Establishments.....number..	10	10	4	4	-	-	1	-	1	-	1	4	-
	Employees.....1,000.....	(D)	(D)	(D)	(D)	-	-	(D)	-	(D)	-	(D)	(D)	-
	Value added in mining.....mil. dol..	(D)	(D)	(D)	(D)	-	-	(D)	-	(D)	-	(D)	(D)	-
13	<b>OIL AND GAS EXTRACTION</b>													
	Establishments.....number..	73	61	7	-	-	7	-	-	-	-	-	54	12
	Employees.....1,000.....	.7	.7	(Z)	-	-	(Z)	-	-	-	-	-	.7	(Z)
	Value added in mining.....mil. dol..	38.2	(D)	(D)	-	-	(D)	-	-	-	-	-	36.7	(D)
131	<b>Crude petroleum and natural gas</b>													
	Establishments.....number..	20	8	7	-	-	7	-	-	-	-	-	1	12
	Employees.....1,000.....	(Z)	(Z)	(Z)	-	-	(Z)	-	-	-	-	-	(Z)	(Z)
	Value added in mining.....mil. dol..	1.5	(D)	(D)	-	-	(D)	-	-	-	-	-	-	(D)
138	<b>Oil and gas field services</b>													
	Establishments.....number..	53	53	-	-	-	-	-	-	-	-	-	53	-
	Employees.....1,000.....	.7	.7	-	-	-	-	-	-	-	-	-	.7	-
	Value added in mining.....mil. dol..	36.7	36.7	-	-	-	-	-	-	-	-	-	36.7	-
14	<b>NONMETALLIC MINERALS, EXCEPT FUELS</b>													
	Establishments.....number..	120	116	7	-	7	-	60	-	60	-	1	48	4
	Employees.....1,000.....	.9	(D)	(D)	-	(D)	-	.7	-	.7	-	(D)	.1	(D)
	Value added in mining.....mil. dol..	44.7	(D)	(D)	-	(D)	-	37.8	-	37.8	-	(D)	5.5	(D)
141	<b>Dimension stone</b>													
	Establishments.....number..	3	3	3	-	3	-	-	-	-	-	-	-	-
	Employees.....1,000.....	(D)	(D)	(D)	-	(D)	-	-	-	-	-	-	-	-
	Value added in mining.....mil. dol..	(D)	(D)	(D)	-	(D)	-	-	-	-	-	-	-	-
142	<b>Crushed and broken stone, including riprap</b>													
	Establishments.....number..	32	32	-	-	-	-	31	-	31	-	1	-	-
	Employees.....1,000.....	.3	.3	-	-	-	-	(D)	-	(D)	-	(D)	-	-
	Value added in mining.....mil. dol..	12.6	12.6	-	-	-	-	(D)	-	(D)	-	(D)	-	-
144	<b>Sand and gravel</b>													
	Establishments.....number..	61	58	1	-	1	-	20	-	20	-	-	37	3
	Employees.....1,000.....	.4	.4	(Z)	-	(Z)	-	.3	-	.3	-	-	.1	(Z)
	Value added in mining.....mil. dol..	22.4	22.4	(Z)	-	(Z)	-	17.9	-	17.9	-	-	4.5	(Z)
145	<b>Clay, ceramic, and refractory minerals</b>													
	Establishments.....number..	3	3	1	-	1	-	1	-	1	-	-	1	-
	Employees.....1,000.....	(D)	(D)	(D)	-	(D)	-	(D)	-	(D)	-	-	(Z)	-
	Value added in mining.....mil. dol..	(D)	(D)	(D)	-	(D)	-	(D)	-	(D)	-	-	-	-

See footnotes at end of table.



**Table 3. Selected Statistics by Type of Operation and Industry Group for the State: 1982—  
Con.**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Industry group and item	All types of establishments	Producing establishments										Nonproducing establishments	
			Total	Mines only				Mines with preparation plants				Separately operated preparation plants		Undistributed <sup>1</sup>
				Total	Underground mines	Open pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open pit mines	Combination and other methods			
14	NONMETALLIC MINERALS, EXCEPT FUELS—Con.													
147	Chemical and fertilizer mineral mining													
	Establishments.....number...	1	1	1	-	1	-	-	-	-	-	-	-	-
	Employees.....1,000...	-	-	-	-	-	-	-	-	-	-	-	-	-
	Value added in mining.....mil. dol...	(Z)	(Z)	(Z)	-	(Z)	-	-	-	-	-	-	-	-
148	Nonmetallic minerals services													
	Establishments.....number...	10	10	-	-	-	-	-	-	-	-	-	10	-
	Employees.....1,000...	(Z)	(Z)	-	-	-	-	-	-	-	-	-	(Z)	-
	Value added in mining.....mil. dol...	1.0	1.0	-	-	-	-	-	-	-	-	-	1.0	-
149	Miscellaneous nonmetallic minerals													
	Establishments.....number...	10	9	1	-	1	-	8	-	8	-	-	-	1
	Employees.....1,000...	(D)	(D)	(Z)	-	(Z)	-	(D)	-	(D)	-	-	-	(D)
	Value added in mining.....mil. dol...	(D)	(D)	(Z)	-	(Z)	-	(D)	-	(D)	-	-	-	(D)

<sup>1</sup>Includes data for separately operated auxiliary establishments in addition to establishments that were not possible to classify based on the information available.

**Table 4a. Summary Statistics for the State: 1982**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1982	Item	1982
Establishments during year.....number...	242	Cost of supplies.....mil. dol...	119.0
With 0 to 19 employees.....do...	221	Supplies used, minerals received, and purchased machinery installed.....do...	77.5
With 20 to 99 employees.....do...	17	Resales.....do...	(Z)
With 100 employees or more.....do...	4	Purchased fuels consumed.....do...	13.3
All employees:		Purchased electric energy:	
Average for year.....1,000...	2.8	Quantity.....mil. kWh...	173.9
Payroll for year.....mil. dol...	66.8	Cost.....mil. dol...	3.7
		Electric energy generated less sold.....mil. kWh...	(D)
		Contract work.....mil. dol...	24.4
Production, development, and exploration workers:		Cost of purchased communication services.....do...	.3
Average for year.....1,000...	2.2	Value of shipments and receipts.....do...	237.5
March.....do...	2.3	Value of resales.....do...	(Z)
May.....do...	2.3	Capital expenditures during year (except land and mineral rights).....do...	43.4
August.....do...	2.2	New capital expenditures during year.....do...	20.9
November.....do...	2.1	Buildings and other structures, except land.....do...	2.9
Hours.....millions...	4.5	Machinery and equipment.....do...	18.0
January to March.....do...	1.1	Used capital expenditures during year.....do...	2.8
April to June.....do...	1.2	Buildings and other structures, except land.....do...	(Z)
July to September.....do...	1.1	Machinery and equipment.....do...	2.8
October to December.....do...	1.1	Mineral exploration and development <sup>1</sup> .....do...	19.7
Wages.....mil. dol...	51.4	Rental payments during year.....do...	1.5
Supplemental labor costs not included in payroll.....do...	15.5	Buildings and other structures, except land.....do...	.2
Legally required expenditures, including Social Security contributions.....do...	7.0	Machinery and equipment.....do...	1.3
Payments for voluntary programs.....do...	8.6	Expensed mineral exploration, development, land, and rights <sup>1 2</sup> .....do...	9.1
Value added by mining.....do...	161.9		

<sup>1</sup>Excludes data for mining service industries and natural gas liquids industry where data were not collected.

<sup>2</sup>Excludes data for mineral land and rights for the crude petroleum and natural gas industry where data were not collected.

**Table 4b. Inventories for the State: End of 1981 and 1982**

[Million dollars. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	End of 1981	End of 1982
<b>Total Inventories<sup>1</sup></b> .....	<b>30.2</b>	<b>22.7</b>
Detail by method of valuation:		
Subject to LIFO costing <sup>2</sup> .....	6.5	5.3
LIFO reserve .....	(D)	(D)
LIFO value .....	(D)	(D)
Not subject to LIFO costing .....	18.1	11.3
Valuation method not reported <sup>3</sup> .....	5.8	6.1
Amount subject to LIFO reported without associated reserve and value <sup>4</sup> .....	(Z)	(Z)

<sup>1</sup>Beginning in the 1982 economic censuses, all respondents were requested to report their inventories at (the lower of) cost or market prior to adjustment to LIFO cost. This is a change from the 1977 census in which respondents were permitted to value their inventories using any generally accepted accounting method.

<sup>2</sup>Only includes data reported by respondents who (a) indicated amount of inventories subject to LIFO cost, and (b) provided sufficient information to determine associated LIFO reserve and value figures.

<sup>3</sup>Includes data estimated for nonresponse and nonmail administrative records and data reported by respondents who provided total inventory figures without other information.

<sup>4</sup>Includes data reported by respondents who indicated their inventories were subject to LIFO cost but did not provide associated LIFO reserve and value figures.

**Table 5. Industry Group Statistics for Counties: 1982 and 1977**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Geographic area and industry group <sup>1</sup>	1982											1977		
		E <sup>2</sup>	Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expend- itures (million dollars)	All em- ployees (1,000)	Value added by mining (million dollars)
			Total (number)	With 20 employees or more (number)	Number <sup>3</sup> (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						
	Washington -----	E2	242	21	2.8	66.8	2.2	4.5	51.4	161.9	119.0	237.5	43.4	2.0	84.9
	Ferry County -----	-	3	2	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
10	Metal mining -----	-	3	2	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
104	Gold and silver ores -----	-	1	1	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	Grant County -----	E1	9	1	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
14	Nonmetallic minerals, except fuels-----	-	4	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
149	Miscellaneous nonmetallic minerals -----	-	2	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	King County -----	E7	51	4	.7	12.9	.5	1.1	9.7	35.9	18.8	46.2	8.8	.3	18.4
13	Oil and gas extraction -----	E8	17	2	.5	9.0	.4	.9	7.2	25.6	(D)	31.3	(D)	(NA)	(NA)
138	Oil and gas field services -----	E8	11	2	BB	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
14	Nonmetallic minerals, except fuels-----	E4	19	2	.2	2.9	.1	.2	2.0	7.2	4.8	11.2	.8	.2	8.4
144	Sand and gravel -----	E1	11	1	.1	1.8	.1	.1	1.2	5.2	2.1	6.8	.8	.1	4.4
	Kittitas County -----	-	8	1	.1	2.6	.1	.2	2.5	5.8	(D)	6.9	(D)	(NA)	(NA)
13	Oil and gas extraction -----	-	7	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
138	Oil and gas field services -----	-	6	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	Lewis County -----	-	7	2	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
12	Bituminous coal and lignite mining -----	-	2	1	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
121	Bituminous coal and lignite mining -----	-	2	1	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	Pierce County -----	E1	10	2	.1	3.2	.1	.2	2.0	5.1	2.2	7.1	.2	(NA)	(NA)
14	Nonmetallic minerals, except fuels-----	E1	7	2	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
144	Sand and gravel -----	-	4	2	.1	2.2	.1	.1	1.8	4.6	(D)	6.5	(D)	(NA)	(NA)
	Snohomish County -----	E3	16	1	.1	1.5	.1	.1	1.2	3.5	1.8	5.0	.3	(NA)	(NA)
	Spokane County -----	E4	45	3	.3	5.7	.2	.4	3.8	10.2	5.8	13.4	2.5	.2	5.7
13	Oil and gas extraction -----	E5	11	1	.1	1.7	.1	.1	1.4	3.9	(D)	5.2	(D)	(NA)	(NA)
138	Oil and gas field services -----	E5	9	1	ZZ	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
14	Nonmetallic minerals, except fuels-----	E4	18	1	.1	1.9	.1	.1	1.6	4.2	(D)	6.2	(D)	.1	4.2
	Stevens County -----	-	8	4	.3	6.3	.2	.4	4.8	16.7	8.3	23.1	1.9	(NA)	(NA)
10	Metal mining -----	-	3	2	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
109	Miscellaneous metal ores -----	-	2	2	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)

See footnotes at end of table.



**Table 5. Industry Group Statistics for Counties: 1982 and 1977—Con.**

<sup>1</sup>County data shown in this table are limited to counties or industry groups with a value of shipments and receipts greater than \$5 million.  
<sup>2</sup>Payroll and sales data for some small single-unit companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate items shown for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of figures shown: E1—10 to 19 percent; E2—20 to 29 percent; E3—30 to 39 percent; E4—40 to 49 percent; E5—50 to 59 percent; E6—60 to 69 percent; E7—70 to 79 percent; E8—80 to 89 percent; E9—90 percent or more.  
<sup>3</sup>Some statistics for counties or industry groups with a value of shipments and receipts greater than \$5 million are withheld to avoid disclosing data for individual companies. However, for such counties and industry groups, number of establishments is shown and employment size range is indicated by one of the following symbols: ZZ—less than 100 employees; AA—100 to 249 employees; BB—250 to 499 employees; CC—500 to 999 employees; EE—1,000 to 2,499 employees; FF—2,500 employees or more.

**Table 6. Number of Mineral Establishments in Major Groups by Employment Size Class for Counties: 1982**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Geographic area and employment size class	All mineral industries	Metal mining (SIC 10)	Anthracite mining (SIC 11)	Bituminous coal and lignite mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)	Geographic area and employment size class	All mineral industries	Metal mining (SIC 10)	Anthracite mining (SIC 11)	Bituminous coal and lignite mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)
<b>Washington</b> .....	242	39	-	10	73	120	<b>Washington—Con.</b>						
0 to 4 employees .....	153	25	-	5	58	65	<b>Kittitas County—Con.</b>						
5 to 9 employees .....	45	7	-	2	6	30	20 to 99 employees .....	1	-	-	-	1	-
10 to 19 employees .....	23	2	-	2	4	15	<b>Klickitat County</b> .....	2	-	-	-	1	1
20 to 49 employees .....	13	2	-	-	2	9	0 to 19 employees .....	2	-	-	-	1	1
50 to 99 employees .....	4	1	-	-	2	-	<b>Lewis County</b> .....	7	-	-	2	1	4
100 to 249 employees .....	2	2	-	-	-	-	0 to 19 employees .....	5	-	-	1	-	4
250 to 499 employees .....	1	-	-	-	1	-	20 to 99 employees .....	1	-	-	1	1	-
500 to 999 employees .....	1	-	-	1	-	-	250 employees or more .....	1	-	-	1	-	-
<b>Adams County</b> .....	10	-	-	1	7	2	<b>Mason County</b> .....	1	-	-	-	1	-
0 to 19 employees .....	10	-	-	1	7	2	0 to 19 employees .....	1	-	-	-	1	-
<b>Benton County</b> .....	3	-	-	-	3	-	250 employees or more .....	1	-	-	-	-	-
0 to 19 employees .....	3	-	-	-	3	-	<b>Okanogan County</b> .....	4	1	-	-	1	2
<b>Chelan County</b> .....	2	1	-	-	-	1	0 to 19 employees .....	4	1	-	-	1	2
0 to 19 employees .....	2	1	-	-	-	1	<b>Pacific County</b> .....	2	-	-	-	-	2
<b>Challam County</b> .....	3	1	-	-	1	1	0 to 19 employees .....	2	-	-	-	-	2
0 to 19 employees .....	3	1	-	-	1	1	<b>Pend Oreille County</b> .....	2	2	-	-	-	-
<b>Clark County</b> .....	7	-	-	-	1	6	0 to 19 employees .....	2	2	-	-	-	-
0 to 19 employees .....	7	-	-	-	1	6	<b>Pierce County</b> .....	10	-	-	-	3	7
<b>Cowlitz County</b> .....	4	-	-	1	-	3	0 to 19 employees .....	8	-	-	-	3	5
0 to 19 employees .....	3	-	-	1	-	2	20 to 99 employees .....	2	-	-	-	-	2
20 to 99 employees .....	1	-	-	-	-	1	<b>San Juan County</b> .....	1	-	-	-	-	1
<b>Ferry County</b> .....	3	3	-	-	-	-	0 to 19 employees .....	1	-	-	-	-	1
0 to 19 employees .....	1	1	-	-	-	-	<b>Skagit County</b> .....	6	-	-	-	-	6
20 to 99 employees .....	1	1	-	-	-	-	0 to 19 employees .....	6	-	-	-	-	6
100 to 249 employees .....	1	1	-	-	-	-	<b>Skamania County</b> .....	1	-	-	-	-	1
<b>Franklin County</b> .....	4	-	-	-	1	3	0 to 19 employees .....	1	-	-	-	-	1
0 to 19 employees .....	4	-	-	-	1	3	<b>Snohomish County</b> .....	16	1	-	1	3	11
<b>Garfield County</b> .....	1	-	-	-	-	1	0 to 19 employees .....	15	1	-	1	3	10
0 to 19 employees .....	1	-	-	-	-	1	20 to 99 employees .....	1	-	-	-	-	1
<b>Grant County</b> .....	9	-	-	-	5	4	<b>Spokane County</b> .....	45	16	-	-	11	18
0 to 19 employees .....	8	-	-	-	5	3	0 to 19 employees .....	42	15	-	-	10	17
20 to 99 employees .....	1	-	-	-	-	1	20 to 99 employees .....	3	1	-	-	1	1
<b>Grays Harbor County</b> .....	2	-	-	-	1	1	<b>Stevens County</b> .....	8	3	-	-	-	5
0 to 19 employees .....	2	-	-	-	1	1	0 to 19 employees .....	4	1	-	-	-	3
<b>Island County</b> .....	1	-	-	-	-	1	20 to 99 employees .....	3	1	-	-	-	2
0 to 19 employees .....	1	-	-	-	-	1	100 to 249 employees .....	1	1	-	-	-	-
<b>Jefferson County</b> .....	1	-	-	-	1	-	<b>Thurston County</b> .....	5	-	-	-	-	5
0 to 19 employees .....	1	-	-	-	1	-	0 to 19 employees .....	5	-	-	-	-	5
<b>King County</b> .....	51	10	-	5	17	19	<b>Walla Walla County</b> .....	2	-	-	-	1	1
0 to 19 employees .....	47	10	-	5	15	17	0 to 19 employees .....	2	-	-	-	1	1
20 to 99 employees .....	3	-	-	-	1	2	<b>Whatcom County</b> .....	8	1	-	-	4	3
250 employees or more .....	1	-	-	-	1	-	0 to 19 employees .....	8	1	-	-	4	3
<b>Kitsap County</b> .....	4	-	-	-	-	4	<b>Whitman County</b> .....	1	-	-	-	-	1
0 to 19 employees .....	4	-	-	-	-	4	0 to 19 employees .....	1	-	-	-	-	1
<b>Kittitas County</b> .....	8	-	-	-	7	1	<b>Yakima County</b> .....	8	-	-	-	3	5
0 to 19 employees .....	7	-	-	-	6	1	0 to 19 employees .....	8	-	-	-	3	5



# Pacific Offshore

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-- Not applicable.

# SUMMARY OF FINDINGS

The total value of shipments and receipts for the 11 establishments classified in mineral industries in the Pacific Offshore area was \$529 million in 1982. Value added by mining amounted to \$488 million in 1982, and payroll amounted to \$39 million.

Mineral industries employment in the Pacific Offshore area was 1.3 thousand in 1982. The oil and gas extraction industry was the only industry in the area.

**Table 1. Historical Statistics for Offshore Areas Not Associated With a State: 1982 and Earlier Census Years**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Kind of operation and year	Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)				
Mineral industries:											
1982 <sup>1</sup> .....	11	7	1.3	39.3	1.0	2.2	29.1	488.3	259.5	529.0	218.7
1977 <sup>1</sup> .....	7	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1972 .....											
1967 .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1963 .....											
1958 .....											

<sup>1</sup>Beginning with 1967, data for single-unit establishments without paid employees were excluded from the census.

**Table 2a. Mineral Establishment Statistics by Industry for Offshore Areas Not Associated With a State: 1982 and 1977**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Industry group and industry	1982												1977	
		Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expendi- tures (million dollars)	All em- ployees <sup>2</sup> (1,000)	Value added by mining (million dollars)	
		E <sup>1</sup>	Total (number)	With 20 employees or more (number)	Number <sup>2</sup> (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)							Wages (million dollars)
	All mineral industries ----	-	11	7	1.3	39.3	1.0	2.2	29.1	488.3	259.5	529.0	218.7	AA	(D)
13	Oil and gas extraction -----	-	11	7	1.3	39.3	1.0	2.2	29.1	488.3	259.5	529.0	218.7	AA	(D)
1311	Crude petroleum and natural gas-----	-	4	2	BB	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
138	Oil and gas field services -----	-	7	5	EE	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	AA	(D)
1381	Drilling oil and gas wells -----	-	2	1	CC	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	AA	(D)
1382	Oil and gas field exploration services -----	-	2	1	AA	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
1389	Oil and gas field services, n.e.c.-----	-	3	3	.1	2.7	.1	.2	2.3	5.3	1.4	6.2	.4	AA	(D)

<sup>1</sup>Payroll and sales data for some small single-unit companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate items shown for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of figures shown: E1—10 to 19 percent; E2—20 to 29 percent; E3—30 to 39 percent; E4—40 to 49 percent; E5—50 to 59 percent; E6—60 to 69 percent; E7—70 to 79 percent; E8—80 to 89 percent; E9—90 percent or more.

<sup>2</sup>General statistics for some industries and industry groups are withheld to avoid disclosing data for individual companies. However, for such industries and industry groups with 100 employees or more, number of establishments is shown and employment size range is indicated by one of the following symbols: AA—100 to 249 employees; BB—250 to 499 employees; CC—500 to 999 employees; EE—1,000 to 2,499 employees; FF—2,500 employees or more.

**Table 2b. Mining Activities of Manufacturing Establishments With Associated Mines by Industry for Offshore Areas Not Associated With a State: 1982**

[Not applicable]



**Table 3. Selected Statistics by Type of Operation and Industry Group for Offshore Areas Not Associated With a State: 1982**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

SIC code	Industry group and item	All types of estab- lish- ments	Producing establishments										Nonpro- ducing estab- lish- ments	
			Total	Mines only				Mines with preparation plants				Seps- arately operated prepara- tion plants		Undistri- buted <sup>1</sup>
				Total	Under- ground mines	Open pit mines	Combina- tion methods, well operations, and other methods	Total	Under- ground mines	Open pit mines	Combina- tion and other methods			
	<b>ALL MINERAL INDUSTRIES</b>													
	Establishments.....number..	11	9	2	-	-	2	-	-	-	-	-	7	2
	Employees.....1,000..	1.3	(D)	(D)	-	-	(D)	-	-	-	-	-	(D)	-
	Value added in mining ..... mil. dol..	488.3	(D)	(D)	-	-	(D)	-	-	-	-	-	(D)	(D)
13	<b>OIL AND GAS EXTRACTION</b>													
	Establishments.....number..	11	9	2	-	-	2	-	-	-	-	-	7	2
	Employees.....1,000..	1.3	(D)	(D)	-	-	(D)	-	-	-	-	-	(D)	-
	Value added in mining ..... mil. dol..	488.3	(D)	(D)	-	-	(D)	-	-	-	-	-	(D)	(D)
131	<b>Crude petroleum and natural gas</b>													
	Establishments.....number..	4	2	2	-	-	2	-	-	-	-	-	-	2
	Employees.....1,000..	(D)	(D)	(D)	-	-	(D)	-	-	-	-	-	-	-
	Value added in mining ..... mil. dol..	(D)	(D)	(D)	-	-	(D)	-	-	-	-	-	-	(D)
138	<b>Oil and gas field services</b>													
	Establishments.....number..	7	7	-	-	-	-	-	-	-	-	-	7	-
	Employees.....1,000..	(D)	(D)	-	-	-	-	-	-	-	-	-	(D)	-
	Value added in mining ..... mil. dol..	(D)	(D)	-	-	-	-	-	-	-	-	-	(D)	-

<sup>1</sup>Includes data for separately operated auxiliary establishments in addition to establishments that were not possible to classify based on the information available.

**Table 4a. Summary Statistics for Offshore Areas Not Associated With a State: 1982**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	1982	Item	1982
Establishments during year..... number..	11	Cost of supplies..... mil. dol..	259.5
With 0 to 19 employees..... do..	4	Supplies used, minerals received, and purchased machinery installed..... do..	153.9
With 20 to 99 employees..... do..	3	Resales..... do..	(D)
With 100 employees or more..... do..	4	Purchased fuels consumed..... do..	7.4
All employees:		Purchased electric energy:	
Average for year.....1,000..	1.3	Quantity..... mil. kWh..	152.7
Payroll for year..... mil. dol..	39.3	Cost..... mil. dol..	11.5
Production, development, and exploration workers:		Electric energy generated less sold..... mil. kWh..	(D)
Average for year.....1,000..	1.0	Contract work..... mil. dol..	(D)
March..... do..	1.0	Cost of purchased communication services..... do..	.9
May..... do..	1.0	Value of shipments and receipts..... do..	529.0
August..... do..	1.1	Value of resales..... do..	(D)
November..... do..	1.0	Capital expenditures during year (except land and mineral rights)..... do..	218.7
Hours..... millions..	2.2	New capital expenditures during year..... do..	(D)
January to March..... do..	.5	Buildings and other structures, except land..... do..	(D)
April to June..... do..	.5	Machinery and equipment..... do..	(D)
July to September..... do..	.6	Used capital expenditures during year..... do..	(D)
October to December..... do..	.5	Buildings and other structures, except land..... do..	-
Wages..... mil. dol..	29.1	Machinery and equipment..... do..	(D)
Supplemental labor costs not included in payroll..... do..	7.3	Mineral exploration and development <sup>1</sup> ..... do..	(D)
Legally required expenditures, including Social Security contributions..... do..	2.7	Rental payments during year..... do..	(D)
Payments for voluntary programs..... do..	4.7	Buildings and other structures, except land..... do..	(D)
Value added by mining..... do..	488.3	Machinery and equipment..... do..	(D)
		Expensed mineral exploration, development, land, and rights <sup>1 2</sup> ..... do..	(D)

<sup>1</sup>Excludes data for mining service industries and natural gas liquids industry where data were not collected.

<sup>2</sup>Excludes data for mineral land and rights for the crude petroleum and natural gas industry where data were not collected.

**Table 4b. Inventories for Offshore Areas Not Associated With a State: End of 1981 and 1982**

[Million dollars. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	End of 1981	End of 1982
<b>Total inventories<sup>1</sup></b> .....	<b>8.7</b>	<b>14.0</b>
Detail by method of valuation:		
Subject to LIFO costing <sup>2</sup> .....	-	-
LIFO reserve .....	-	-
LIFO value .....	-	-
Not subject to LIFO costing .....	(D)	(D)
Valuation method not reported <sup>3</sup> .....	(D)	(D)
Amount subject to LIFO reported without associated reserve and value <sup>4</sup> .....	-	-

<sup>1</sup>Beginning in the 1982 economic censuses, all respondents were requested to report their inventories at (the lower of) cost or market prior to adjustment to LIFO cost. This is a change from the 1977 census in which respondents were permitted to value their inventories using any generally accepted accounting method.

<sup>2</sup>Only includes data reported by respondents who (a) indicated amount of inventories subject to LIFO cost, and (b) provided sufficient information to determine associated LIFO reserve and value figures.

<sup>3</sup>Includes data estimated for nonresponse and nonmail administrative records and data reported by respondents who provided total inventory figures without other information.

<sup>4</sup>Includes data reported by respondents who indicated their inventories were subject to LIFO cost but did not provide associated LIFO reserve and value figures.

**Table 5. Industry Group Statistics for Offshore Areas Not Associated With a State: 1982 and 1977**

[Not applicable]

**Table 6. Number of Mineral Establishments in Major Groups by Employment Size Class for Offshore Areas Not Associated With a State: 1982**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Geographic area and employment size class	All mineral industries (SIC 10)	Metal mining (SIC 11)	Anthracite mining (SIC 11)	Bituminous coal and lignite mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)	Geographic area and employment size class	All mineral industries	Metal mining (SIC 10)	Anthracite mining (SIC 11)	Bituminous coal and lignite mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)
<b>Pacific</b> .....	<b>11</b>	-	-	-	<b>11</b>	-	<b>Pacific—Con.</b>						
0 to 4 employees .....	3	-	-	-	3	-	50 to 99 employees .....	1	-	-	-	1	-
10 to 19 employees .....	1	-	-	-	1	-	100 to 249 employees .....	3	-	-	-	3	-
20 to 49 employees .....	2	-	-	-	2	-	500 to 999 employees .....	1	-	-	-	1	-





# APPENDIX A.

## Explanation of Terms

**Employment and related items**—The report forms requested separate information on production, development, and exploration workers as of a payroll period for each quarter of the year and for other employees as of the payroll period which included the 12th of March.

**All employees**—This item includes all full-time and part-time employees on the payrolls of mining establishments for any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Also included are employees working for miners paid on a per ton, car, or yard basis. Excluded are employees at the mine but on the payroll of another employer (such as employees of contractors) and employees at company stores, boarding houses, bunk houses, and recreational centers. Also excluded are members of the Armed Forces and pensioners carried on the active rolls but not working during the period. Officers of corporations are included as employees, but proprietors and partners of unincorporated firms are excluded.

**Production, development, and exploration workers**—This category includes employees (up through the working supervisor level) engaged in manual work: using tools, operating machines, hauling materials, loading and hauling products out of the mine in mine cars or trucks, and caring for mines, plants, mills, shops, or yards. Included are exploration work, mine development, storage, shipping, maintenance, repair, janitorial, and guard services, auxiliary production for use at establishments (such as power plant), record keeping, and other services closely associated with these production and development operations at the establishment covered by the report. Gang and straw bosses and supervisors who performed manual labor are included, as are employees paid on either a time- or piece-rate basis. Also included are miners paid on a per ton, car, or yard basis and persons engaged by them and paid out of the total amount received by these miners. In addition, other employees at the establishment but not on its payroll are included if paid directly through its own employees, such as superintendents and supervisors. The payments received by these types of employees are included as part of the establishments payroll. Supervisory employees above the working supervisor level are excluded from this category.

**All other employees**—Nonproduction personnel at the establishment include those engaged in the following activities: Supervision above the working supervisor level, sales, highway trucking (by employees not entering mines or pits), advertising, credit, collection, clerical and routine office functions, executive, purchasing, financing, legal,

personnel (including cafeteria and medical), professional (such as engineers and geologists), and technical activities. Also included are employees on the payroll of the establishment engaged in the construction of major additions or alterations to the plant and who are utilized as a separate work force. (Workers engaged in regular maintenance and repair operations are not included here but are classified as production, development, and exploration workers.)

**Separately operated auxiliary establishments employees**—This item includes employment at separate central administrative offices or auxiliary units of multiestablishment companies and at those offices or units servicing more than one establishment during the payroll period which included March 12. Establishments were classified on the basis of the industry or principal industry served. Employees at an office located at or near the mining establishment are usually included in the mine report.

**All employees, average for year**—The 1982 census report form requested employment figures for production, development, and exploration workers for four selected pay periods (mid-March, May, August, and November). For all other employees, only a mid-March figure was requested. The annual average is an average of the four monthly figures for production, development, and exploration workers plus the March figure for all other employees. This approach was used to simplify the schedule format and lighten the reporting burden of respondents, since it was found that the average of these selected pay periods closely approximates, for most industries, the average employment for the year that would be obtained from 12 monthly pay periods.

**Payroll**—This term includes all forms of compensation such as salaries, wages, commissions, payments received on a ton, car, or yard basis, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern, and payments to members of Armed Forces and pensioners carried on the active payroll of mining establishments. Also excluded are royalty payments to unions and costs of smithing, explosives, fuses, electric cap lamps, and mine supplies used in production and development work but charged to employees and deducted from their wages. As in the case of employment and establishment figures, the annual payrolls of separate auxiliary establishments of multiestablishment companies are included in the totals for individual industries and for States. Respondents were told that in reporting they could follow the definition of payroll used for calculating the Federal withholding tax.



**Production, development, and exploration worker hours**—This item represents all hours that production, development, and exploration workers worked, both on active days during which there was production or development work and on inactive days when only security guards, inspectors, repairpersons, and other maintenance persons were on duty. It includes all hours worked or paid for at the mining operations, except hours paid for vacations, holidays, or sick leave, when the employee was not at the establishment. Included are actual overtime hours, not straight-time equivalent hours. Hours of working proprietors or partners are excluded.

**Supplemental Labor Costs**—This item represents employer's cost for fringe benefits not included in payrolls.

**Legally required expenditures, including social security contributions**—This cost includes employer contributions for all programs required under Federal and State legislation, such as Federal Old Age and Survivors' Insurance, unemployment compensation, and worker's compensation. Also included are legally required State temporary disability payments.

**Payments for voluntary programs**—Included in this cost are payments resulting from union negotiated contracts and all employer payments of insurance premiums on hospital and medical plans, life insurance premiums, and premiums on supplementary accident and sickness insurance. For programs supported by joint employer-employee contributions, only the employer payments are included. Also included are payments or allocations on all pension plans regardless of methods of administration, supplemental unemployment compensation plans, welfare plans, stock purchase plans in which the employer payment is not subject to withholding tax, and deferred profit sharing plans.

**Value added by mining**—This measure of mining activity is derived by subtracting the cost of supplies used, minerals received for preparation, purchased machinery installed, purchased fuel, purchased electricity, and contract work from the sum of the value of shipments (mining products plus receipts for services rendered) and total capital expenditures. This statistic avoids the duplication in value of shipments and receipts which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure of value added not only in mineral production but also in the development of mineral properties. For these reasons, it is considered to be the best value measure for comparing the relative economic importance of mining among industries and geographic areas.

**Cost of supplies used, purchased machinery installed, etc.**—Besides supplies used and purchased machinery installed, this cost includes fuels and electric energy used and contract work done by others for each establishment. It includes charges to both the current and capital accounts. It also includes the cost of items used during 1982 whether they were purchased, withdrawn from inventories, or received from other establishments of the company. For selected supplies and fuels and for electric energy, both quantity and cost data were requested. The cost data refer to direct charges actually paid or payable (after discounts) for items used during the year.

Freight charges and other direct charges incurred by the establishment in acquiring the item are included. Companies whose records did not show actual amounts used were asked to approximate use by adding purchases (or receipts) during the year to opening inventory and subtracting closing inventory. Separate figures were requested for: (1) selected supplies used, minerals received for preparation, and purchased machinery installed; (2) electric energy purchased; (3) purchased fuels used for heat, power, or the generation of electricity; (4) contract work done by others; and (5) products bought and resold in the same condition. Supplies and equipment used in mine development, plant expansion, and capitalized repairs, which are chargeable to fixed assets accounts, are included in this item, as are supplies furnished without charge to contractors for use at the mining operation and supplies sold to employees for use at the establishment. Excluded are such costs as advertising, insurance, telephone, and research and consulting services of other establishments; or such overhead costs as depreciation charges, rent, interest, and royalties.

**Value of shipments and receipts**—The amounts shown as value of shipments and receipts for each industry are the net selling values, f.o.b. mine or plant after discounts and allowances, excluding freight charges. "Shipments" include all products physically shipped from the establishment during 1982, including material withdrawn from stockpiles and products shipped on consignment, whether or not sold in 1982. For products transferred to other establishments of the same company or prepared on a custom basis, companies were requested to report the estimated value, not merely the cost of producing the items. Multiestablishment companies were asked to report value information for each establishment as if it were a separate economic unit. They were instructed to report the value of all products transferred to other plants of the company at their full economic value, i.e., to include, in addition to direct cost of production, a reasonable proportion of company overhead and profits.

For all establishments classified in an industry, value of shipments and receipts includes: (1) the value of all "primary" products of the industry, (2) the value of "secondary" products which are primary to other industries, (3) the receipts for contract work done for others, except custom milling, and (4) the value of products purchased and resold without further processing. Receipts for custom milling are not included to avoid duplication with the value of custom milled ores included in an industry's primary and secondary products.

Some duplication exists in industry and industry group totals because of the inclusion of materials transferred from one establishment to another for mineral preparation or resale.

**Capital expenditures**—This item covers expenditures made during the year for development and exploration of mineral properties, for new construction, and for purchased machinery chargeable to fixed assets accounts of the mineral establishment. They are the type for which depreciation, depletion, or Office of Minerals Exploration accounts are ordinarily maintained. Capital expenditures during 1982 were to be determined as "additions completed during the year plus construction in progress at the end of the year minus construction in progress at the beginning of the year." Reported capital expenditures were to include work done on contract, as well as by the mine forces.

Expenditures for machinery and equipment were to include those made for replacement purposes, as well as those for additions to capacity. Excluded from these expenditures were costs of maintenance and repairs charged as current operating expense and expenditures for land and mineral rights.

Whenever applicable, separate figures were provided for expenditures for development and exploration of mineral property, construction of preparation plants and other construction, new machinery and equipment, used plant, and used equipment acquired from others.

**Rental payments**— This item consists of rental payments made to other companies for use of such depreciable assets as buildings, other structures, machinery, and equipment. It does not include payments made to the parent company or another subsidiary of the parent company for the use of buildings and equipment owned by the parent company or its subsidiary. The value of such company-owned assets is included in the gross value of depreciable assets.

**Current account expenditures**— This item includes all expenses for mineral properties, exploration, and development charged to current accounts. This includes all supplies, machinery, equipment, parts, fuels, power, etc., used for development or exploration and charged to current operating expenses. Also included are royalty payments, acquisition costs for mineral land and rights which were not capitalized, and the cost of maintenance and repairs associated with exploration or development activity and charged to current accounts.

**Inventories**— This item includes inventories of mined or quarried products, and supplies, parts, fuels, etc., at the beginning and end of the year. Beginning in the 1982 Census of Mineral Industries, all respondents were requested to report their inventories at (the lower of) cost or market prior to adjustment to LIFO cost. This is a change from the 1977 census in which respondents were permitted to value their inventories using any generally accepted accounting method. The inventory figures for 1982, therefore, will not be comparable to prior census data because of the change in reporting instructions.





# **APPENDIX B.**

## **Geographic Divisions and States**

### **NEW ENGLAND STATES**

Connecticut  
Maine  
Massachusetts  
New Hampshire  
Rhode Island  
Vermont  
North and Mid-Atlantic Offshore

### **MIDDLE ATLANTIC STATES**

New Jersey  
New York  
Pennsylvania

### **EAST NORTH CENTRAL STATES**

Illinois  
Indiana  
Michigan  
Ohio  
Wisconsin

### **WEST NORTH CENTRAL STATES**

Iowa  
Kansas  
Minnesota  
Missouri  
Nebraska  
North Dakota  
South Dakota

### **SOUTH ATLANTIC STATES**

Delaware  
District of Columbia  
Florida  
Georgia  
Maryland

### **SOUTH ATLANTIC STATES—Con.**

North Carolina  
South Carolina  
Virginia  
West Virginia  
South Atlantic Offshore

### **EAST SOUTH CENTRAL STATES**

Alabama  
Kentucky  
Mississippi  
Tennessee

### **WEST SOUTH CENTRAL STATES**

Arkansas  
Louisiana  
Oklahoma  
Texas  
Northern Gulf of Mexico Offshore

### **MOUNTAIN STATES**

Arizona  
Colorado  
Idaho  
Montana  
Nevada  
New Mexico  
Utah  
Wyoming

### **PACIFIC STATES**

Alaska  
California  
Hawaii  
Oregon  
Washington  
Pacific Offshore





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Publications of the 1982 Census of Mineral Industries, containing data on establishments primarily engaged in the extraction of minerals, are described below. Publications order forms for the specific reports may be obtained from any Department of Commerce district office or from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, D.C. 20233.

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